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     FILE 'HCAPLUS' ENTERED AT 14:30:38 ON 07 NOV 2008
L1           768 S POLYSIALIC ACID
L2         20125 S MALEIMIDE OR IODOACETAMIDE OR VINYLSULPHONE OR (ORTHOPYRIDYL)
L3         20637 S MALEIMIDE OR IODOACETAMIDE OR VINYLSULPHONE OR VINYLSULFONE O
L4             2 S L1 AND L3

     FILE 'REGISTRY' ENTERED AT 14:32:01 ON 07 NOV 2008
                EXP POLYSIALIC/CN
                EXP POLYSIAL/CN
     FILE 'REGISTRY' ENTERED AT 14:42:47 ON 07 NOV 2008
L5               STRUCTURE UPLOADED
L6             0 S L5
L7             0 S L5 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 14:48:00 ON 07 NOV 2008
L8       2483134 S PROTEIN OR PEPTIDE OR POLYPEPTIDE
L9        217633 S CONJUGATE?
L10        59811 S THIOL
L11          970 S L8 AND L9 AND L10
L12            0 S L1 AND L11
L13       174964 S POLYSACCHARIDE OR GLYCOPROTEIN
L14           38 S L11 AND L13
L15           32 S L14 AND (PY<2004 OR AY<2004 OR PRY<2004)
L16            7 S L3 AND L15
L17        20181 S (N-HYDROXYSUCCINIMIDE) OR CARBODIIMIDE
L18        68557 S POLYSACCHARIDE OR POLYSIALIC
L19          358 S L17 AND L18
L20       258682 S CONJUGAT?
L21          145 S L19 AND L20
L22      2268580 S POLYPEPTIDE OR PROTEIN
L23           82 S L21 AND L22
L24        59811 S THIOL
L25            0 S L23 AND L24
L26        49352 S SIAL?
L27            2 S L23 AND L26
L28           62 S L23 AND (PY<2003 OR AY<2003 OR PRY<2003)

     FILE 'REGISTRY' ENTERED AT 15:51:53 ON 07 NOV 2008
L29              STRUCTURE UPLOADED
L30            0 S L29
L31              STRUCTURE UPLOADED
L32            5 S L31
L33           79 S L31 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 15:53:37 ON 07 NOV 2008
L34           38 S L33
L35           38 S COJUGAT?
L36       258682 S CONJUGAT?
L37            1 S L34 AND L36
L38        69242 S POLYSACCHARIDE OR POLYSIAL?
L39       107812 S POLYSACCH?
L40            1 S L34 AND L39
L41            0 S THIOSETER
L42         4242 S THIOESTER
L43         1490 S POLYSIAL?
L44            1 S L42 AND L43
L45        67865 S POLYSACCHARIDE
L46           10 S L42 AND L45
L47            7 S L46 AND (PY<2004 OR AY<2004 OR PRY<2004)
L48          184 S L22 AND L36 AND L42
L49        77759 S (SACCHARIDE OR POLYSACCHARIDE)
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L50	5	S	L48 AND L49
L51	26060	S	LINKER
L52	11	S	L48 AND L51
L53	7	S	L52 AND (PY<2004 OR AY<2004 OR PRY<2004)

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=> file hcaplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

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FILE COVERS 1907 - 7 Nov 2008  VOL 149 ISS 20
FILE LAST UPDATED: 6 Nov 2008  (20081106/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s polysialic acid
           794 POLYSIALIC
       4704441 ACID
L1          768 POLYSIALIC ACID
                (POLYSIALIC(W)ACID)

=> s maleimide or iodoacetamide or vinylsulphone or (orthopyridyl)
         15239 MALEIMIDE
          5091 IODOACETAMIDE
             5 VINYLSULPHONE
             5 ORTHOPYRIDYL
L2       20125 MALEIMIDE OR IODOACETAMIDE OR VINYLSULPHONE OR (ORTHOPYRIDYL)

=> s maleimide or iodoacetamide or vinylsulphone or vinylsulfone or (orthopyridyl)
         15239 MALEIMIDE
          5091 IODOACETAMIDE
             5 VINYLSULPHONE
           532 VINYLSULFONE
             5 ORTHOPYRIDYL
L3       20637 MALEIMIDE OR IODOACETAMIDE OR VINYLSULPHONE OR VINYLSULFONE OR
               (ORTHOPYRIDYL)

=> s l1 and l3
L4           2 L1 AND L3

=> d l4 1-2 ti abs bib

L4   ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Fractionation of charged polysaccharide
```

AB Polydisperse and charged polysaccharides are fractionated into low polydispersity fractions (preferably having Mw/Mn<1.1), each containing species within a narrow range of mol. wts. An aqueous solution of the polydisperse polysaccharides is contacted with an ion exchange resin in a column and the polysaccharides are subjected to selective elution by aqueous elution buffer. The selective elution consists of at least 3 sequential elution buffers having different and constant ionic strength and/or pH and in which the subsequent buffers have ionic strength and/or pH than those of the preceding step. The new prepns. are particularly suitable for the production of polysialic acid-derivatized therapeutic agents intended for use in humans and animals.

AN 2006:149931 HCAPLUS <<LOGINID::20081107>>

DN 144:214631

TI Fractionation of charged polysaccharide

IN Jain, Sanjay; Papaioannou, Ioannis; Laing, Peter

PA Lipoxen Technologies Limited, UK

SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006016161	A1	20060216	WO 2005-GB3149	20050812
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	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	WO 2005016974	A1	20050224	WO 2004-GB3511	20040812
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	EP 1789454	A1	20070530	EP 2005-794240	20050812
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	JP 2008510024	T	20080403	JP 2007-525353	20050812
	IN 2007DN01099	A	20070427	IN 2007-DN1099	20070209
	US 20080132696	A1	20080605	US 2007-660133	20070828
PRAI	WO 2004-GB3511	A	20040812		
	EP 2005-251016	A	20050223		
	EP 2003-254989	A	20030812		
	WO 2005-GB3149	W	20050812		

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of amino acid-containing poly-sialic acid derivatives used for drug delivery systems and their binding to proteins

AB A poly-sialic acid compound is reacted with a hetero-bifunctional reagent to introduce a pendant functional group for site-specific conjugation to sulfhydryl groups, for instance side chains of cysteine units in drugs, drug delivery systems, proteins or peptides. The functional group is, for instance, an N-maleimide group. Thus, colominic acid derivs. were prepared and used for drug delivery systems and their binding to proteins.

AN 2005:161032 HCAPLUS <<LOGINID::20081107>>

DN 142:261738

TI Preparation of amino acid-containing poly-sialic acid derivatives used for drug delivery systems and their binding to proteins

IN Hreczuk-Hirst, Dale Howard; Jain, Sanjay; Laing, Peter; Gregoriadis, Gregory; Papaioannou, Ioannis

PA Lipoxen Technologies Limited, UK

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005016973	A1	20050224	WO 2004-GB3488	20040812
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1654289	A1	20060510	EP 2004-768054	20040812
EP 1654289	B1	20071003		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2007501888	T	20070201	JP 2006-523054	20040812
AT 374788	T	20071015	AT 2004-768054	20040812
ES 2294535	T3	20080401	ES 2004-768054	20040812
RU 2327703	C2	20080627	RU 2006-107545	20040812
WO 2006016168	A2	20060216	WO 2005-GB3160	20050812
WO 2006016168	A3	20060504		
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1776389	A2	20070425	EP 2005-794259	20050812
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     CN 101039965        A     20070919    CN 2005-80034588        20050812
     JP 2008510025       T     20080403    JP 2007-525356          20050812
     IN 2006DN00903      A     20070810    IN 2006-DN903           20060221
     US 20060270830      A1    20061130    US 2006-568111          20060713
     US 20070282096      A1    20071206    US 2007-660128          20070713
PRAI EP 2003-254988      A     20030812
     EP 2003-255200      A     20030821
     WO 2004-GB3488      W     20040812
     EP 2005-251015      A     20050223
     WO 2005-GB3160      W     20050812
OS   CASREACT 142:261738; MARPAT 142:261738
RE.CNT  7     THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


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COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                    ENTRY    SESSION
FULL ESTIMATED COST                                 11.20      11.41

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                    ENTRY    SESSION
CA SUBSCRIBER PRICE                                 -1.60      -1.60

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STRUCTURE FILE UPDATES:    6 NOV 2008  HIGHEST RN 1071288-19-1
DICTIONARY FILE UPDATES:   6 NOV 2008  HIGHEST RN 1071288-19-1

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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> exp polysialic/cn
E1            1     POLYSIALATE INITIATOR SIALYLTRANSFERASE/CN
E2            2     POLYSIALATE SYNTHASE/CN
E3            0 --> POLYSIALIC/CN
E4            1     POLYSIALIC ACID BIOSYNTHESIS (LEGIONELLA PNEUMOPHILA PNEUMOP
                    HILA STRAIN PHILADELPHIA 1)/CN
E5            1     POLYSIALIC ACID BIOSYNTHESIS PROTEIN (ESCHERICHIA COLI STRAI
                    N APEC O1 GENE NEUC)/CN
E6            1     POLYSIALIC ACID BIOSYNTHESIS PROTEIN NEUE (ESCHERICHIA COLI
                    STRAIN APEC O1 GENE NEUE)/CN
E7            1     POLYSIALIC ACID BIOSYNTHESIS PROTEIN P7 (ESCHERICHIA COLI ST
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E10           1     POLYSIALIC ACID CAPSULE BIOSYNTHESIS PROTEIN SYNX (NEISSERIA
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E11           1     POLYSIALIC ACID CAPSULE EXPRESSION PROTEIN (AQUIFEX AEOLICUS
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E12           1     POLYSIALIC ACID CAPSULE EXPRESSION PROTEIN (BARTONELLA HENSE
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=> exp polysial/cn
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E3            0 --> POLYSIAL/CN
E4            1     POLYSIALATE INITIATOR SIALYLTRANSFERASE/CN
E5            2     POLYSIALATE SYNTHASE/CN
E6            1     POLYSIALIC ACID BIOSYNTHESIS (LEGIONELLA PNEUMOPHILA PNEUMOP
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E7            1     POLYSIALIC ACID BIOSYNTHESIS PROTEIN (ESCHERICHIA COLI STRAI
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E8            1     POLYSIALIC ACID BIOSYNTHESIS PROTEIN NEUE (ESCHERICHIA COLI
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FULL ESTIMATED COST                                 0.46      11.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                 0.00      -1.60

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PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 14:42:32 ON 07 NOV 2008
FILE 'REGISTRY' ENTERED AT 14:42:32 ON 07 NOV 2008
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COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
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	ENTRY	SESSION
FULL ESTIMATED COST	0.46	11.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.60

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.46	11.87

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CA SUBSCRIBER PRICE	0.00	-1.60

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FILE COVERS 1907 - 7 Nov 2008 VOL 149 ISS 20
FILE LAST UPDATED: 6 Nov 2008 (20081106/ED)

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=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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STRUCTURE FILE UPDATES: 6 NOV 2008 HIGHEST RN 1071288-19-1

DICTIONARY FILE UPDATES: 6 NOV 2008 HIGHEST RN 1071288-19-1

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  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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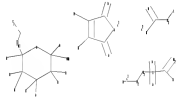

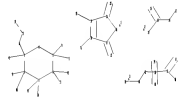

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35 36 37 38 39 40 41 42 43
ring nodes :
1 2 3 4 5 6 16 17 18 19 20
chain bonds :

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1-10  1-41  2-39  2-40  3-8  3-43  5-7  5-9  6-11  6-42  8-12  12-13  17-21  18-36
19-37  20-22  23-24  24-25  24-26  25-27  28-29  28-30  28-31  28-32  31-33  31-38
32-34  34-35

ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  16-17  16-20  17-18  18-19  19-20
exact/norm bonds :
1-2  1-6  1-10  2-3  3-4  4-5  5-6  5-9  6-11  12-13  16-17  16-20  17-18  17-21
18-19  19-20  20-22  23-24  24-26  28-29  28-30  28-31
exact bonds :
1-41  2-39  2-40  3-8  3-43  5-7  6-42  8-12  18-36  19-37  24-25  25-27  28-32
31-33  31-38  32-34  34-35


G1:[*1],[*2],[*3]

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:CLASS  10:CLASS
11:CLASS  12:CLASS  13:CLASS  16:Atom  17:Atom  18:Atom  19:Atom  20:Atom  21:CLASS
 22:CLASS
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33:CLASS  34:CLASS  35:CLASS  36:CLASS  37:CLASS  38:CLASS  39:CLASS  40:CLASS
41:CLASS  42:CLASS
43:CLASS



L5      STRUCTURE UPLOADED

=> s l5
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SAMPLE SCREEN SEARCH COMPLETED -        4 TO ITERATE

100.0% PROCESSED        4 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            4 TO      200
PROJECTED ANSWERS:               0 TO        0

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L5              STR
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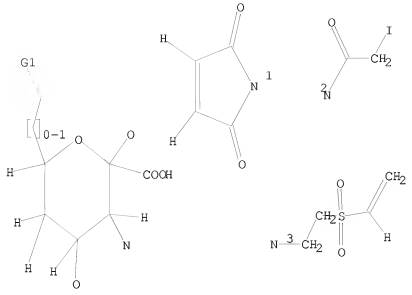

G1 [@1],[@2],[@3]

Structure attributes must be viewed using STN Express query preparation.

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=> s l5 sss full
FULL SEARCH INITIATED 14:43:27 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -       95 TO ITERATE

100.0% PROCESSED       95 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

L7             0 SEA SSS FUL L5

=> d his

     (FILE 'HOME' ENTERED AT 14:30:32 ON 07 NOV 2008)

     FILE 'HCAPLUS' ENTERED AT 14:30:38 ON 07 NOV 2008
L1           768 S POLYSIALIC ACID
L2         20125 S MALEIMIDE OR IODOACETAMIDE OR VINYLSULPHONE OR (ORTHOPYRIDYL)
L3         20637 S MALEIMIDE OR IODOACETAMIDE OR VINYLSULPHONE OR VINYLSULFONE O
L4             2 S L1 AND L3

     FILE 'REGISTRY' ENTERED AT 14:32:01 ON 07 NOV 2008
                EXP POLYSIALIC/CN
                EXP POLYSIAL/CN

     FILE 'HCAPLUS' ENTERED AT 14:42:43 ON 07 NOV 2008

     FILE 'REGISTRY' ENTERED AT 14:42:47 ON 07 NOV 2008
L5                STRUCTURE UPLOADED
L6             0 S L5
L7             0 S L5 SSS FULL

=> log hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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	ENTRY	SESSION
FULL ESTIMATED COST	178.36	192.92

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.60

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:43:32 ON 07 NOV 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:SSPTAEXO1623

PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 14:47:53 ON 07 NOV 2008
FILE 'REGISTRY' ENTERED AT 14:47:53 ON 07 NOV 2008
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	178.36	192.92

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.60

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	178.36	192.92

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.60

FILE 'HCAPLUS' ENTERED AT 14:48:00 ON 07 NOV 2008
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FILE COVERS 1907 - 7 Nov 2008 VOL 149 ISS 20
FILE LAST UPDATED: 6 Nov 2008 (20081106/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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=> s protein or peptide or polypeptide
       2226823 PROTEIN
        405202 PEPTIDE
        110434 POLYPEPTIDE
L8     2483134 PROTEIN OR PEPTIDE OR POLYPEPTIDE

=> s conjugate?
L9      217633 CONJUGATE?

=> s thiol
L10      59811 THIOL

=> s l8 and l9 and l10
L11        970 L8 AND L9 AND L10

=> s l1 and l11
L12          0 L1 AND L11

=> s polysaccharide or glycoprotein
         67865 POLYSACCHARIDE
        108253 GLYCOPROTEIN
L13     174964 POLYSACCHARIDE OR GLYCOPROTEIN

=> s l11 and l13
L14         38 L11 AND L13

=> s l14 and (PY<2004 or AY<2004 or PRY<2004)
      24009920 PY<2004
       4789233 AY<2004
       4260426 PRY<2004
L15         32 L14 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> s l3 and l15
L16          7 L3 AND L15

=> d l16 1-7 ti abs bib

L16  ANSWER 1 OF 7  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Ribosomal complexes with microbial polynucleotides for mucosal vaccination
AB   The author discloses immunogenic complexes comprising a ribosomal particle
     complex of a microbe and a polynucleotide mol. encoding an antigen.  The
     ribosomal particle complex is composed of the subunits of ribosomes (50 S
     and 30 S subunits in bacteria and 60 S and 40 S subunits in eukaryotes),
     with the ribosomal subunits generally retaining sufficient integrity to
     preserve the double-stranded nature of the large r-RNA's (16 S and 23S in
     bacteria; 18S and 28S in eukaryotic cytosol) contained in the ribosomal
     subunits.  In one example, Bordetella pertussis ribosomal complexes were
     first derivatized with maleimide and conjugated to a
     thiol-derivatized cDNA encoding filamentous hemagglutinin.  Nasal
     immunization of mice demonstrated a protective response.
AN   2002:521541  HCAPLUS <<LOGINID::20081107>>
DN   137:77880
TI   Ribosomal complexes with microbial polynucleotides for mucosal vaccination
```

IN Timmerman, Benedikt
PA Fr.
SO PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2002053189	A2	20020711	WO 2002-IB738	20020104	<--
	WO 2002053189	A3	20031120			
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
	GB 2370839	A	20020710	GB 2001-758	20010106	<--
	AU 2002236159	A1	20020716	AU 2002-236159	20020104	<--
	EP 1379280	A2	20040114	EP 2002-702656	20020104	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
	US 20040057962	A1	20040325	US 2003-250668	20030707	<--
PRAI	GB 2001-758	A	20010106	<--		
	WO 2002-IB738	W	20020104	<--		

L16 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis of LJP 993, a Multivalent Conjugate of the N-Terminal Domain of β2GPI and Suppression of an Anti-β2GPI Immune Response
AB LJP 993, a tetravalent conjugate of the amino-terminal domain (domain 1) of β2- glycoprotein I (β2GPI), was synthesized, and studies were carried out to explore the ability of LJP 993 to bind anti-β2GPI antibodies and to function as a B cell toleragen. Domain 1 was expressed in Pichia pastoris, and the N-terminus was site-specifically modified by a transamination reaction converting the N-terminal glycine to a glyoxyl group. A tetravalent platform was synthesized with linkers that terminate in aminooxy groups. This was accomplished by preparing an ethylene glycol-based heterobifunctional linker that contains both a Boc-protected aminooxy group and a free primary amine. The linker was used to modify a tetravalent platform mol. by reacting the amino groups on the linker with 4-nitrophenyl carbonate esters on the platform to provide a linker-modified platform, and the Boc protecting groups were removed to provide a tetravalent aminooxy platform. Glyoxylated domain 1 was attached to the platform to provide LJP 993 by formation of oxime bonds. The protein domains of LJP 993 retain activity as evidenced by the ability of LJP 993 to bind to anti-β2GPI antibodies. Dissociation consts. (Kd) for domain 1 and LJP 993 bound to immobilized affinity-purified anti-β2GPI antibodies from autoimmune thrombosis patients were determined using surface plasmon resonance. An immunized mouse model was developed to test the ability of LJP 993 to act as a toleragen. A thiol containing domain 1 analog was expressed in insect cells using the baculovirus expression system, and it was used to prepare an immunogenic conjugate of domain 1 and maleimide -derivatized keyhole limpet hemocyanin (KLH). Mice were immunized with the KLH conjugate, and spleen cells were harvested from the immunized mice. The cells were incubated with various concns. of LJP 993 and transferred to mice whose immune systems had been compromised by

irradiation The hosts were then boosted with the KLH-domain 1 conjugate, and after 7 days their antibody levels were measured. Host mice receiving cells that were treated with LJP 993 produced significantly lower amts. of anti-domain 1 antibodies than controls which received untreated cells, indicative of B cell tolerance.

AN 2001:792592 HCAPLUS <<LOGINID::20081107>>
DN 136:84354
TI Synthesis of LJP 993, a Multivalent Conjugate of the N-Terminal Domain of β2GPI and Suppression of an Anti-β2GPI Immune Response
AU Jones, David S.; Cockerill, Keith A.; Gamino, Christina A.; Hammaker, Jeffrey R.; Hayag, Merle S.; Iverson, G. Michael; Linnik, Matthew D.; McNeeley, Patricia A.; Tedder, Martina E.; Ton-Nu, Huong-Thu; Victoria, Edward J.
CS La Jolla Pharmaceutical Company, San Diego, CA, 92121, USA
SO Bioconjugate Chemistry (2001), 12(6), 1012-1020
CODEN: BCCHES; ISSN: 1043-1802
PB American Chemical Society
DT Journal
LA English
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of Fab' from murine IgG2a for thiol reactive conjugation
AB Lysyl endopeptidase (LE) from Achromobacter lyticus M497-1 (E.C. 3.4.21.50) was utilized to prepare F(ab')2 fragments from mouse anti-P-glycoprotein IgG2a obtained from the UIC2 hybridoma. This report describes a novel single step purification procedure for F(ab')2 fragments that eliminates residual LE activity responsible for secondary cleavage of F(ab')2 to Fab fragments. The purification of F(ab')2 and Fc fragments was accomplished utilizing protein G affinity chromatog. and either gradient or step changes in the pH/ionic strength for elution of the Fc and F(ab')2 fragments. Residual LE was eluted from the protein G column with buffer containing 200 mM L-lysine prior to elution of F(ab')2 and Fc fragments. The activity of LE was monitored using the fluorogenic substrate Boc-Val-Leu-Lys-7-amido 4-Me coumarin. A similar purification procedure for F(ab')2 fragments produced following pepsin digestion of IgG2a is also outlined. The ability of Fab' fragments, from reduced F(ab')2 fragments following LE digestion of IgG2a, to conjugate to thiol reactive groups was demonstrated using N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer-meso chlorin e6 mono (N-2-aminoethylamide) (Mce6) conjugates containing reactive maleimide groups. The biol. activity of the Fab' targeted HPMA copolymer-Mce6 conjugates was tested against the P-glycoprotein expressing human ovarian carcinoma A2780/AD cell line utilizing a cell survival assay. Fab' targeted HPMA copolymer-Mce6 conjugate demonstrated significantly higher cytotoxicity than either a monoclonal antibody (mAb) targeted HPMA copolymer-Mce6 conjugate or a non-targeted HPMA copolymer-Mce6 conjugate ,.
AN 2001:620618 HCAPLUS <<LOGINID::20081107>>
DN 136:4358
TI Preparation of Fab' from murine IgG2a for thiol reactive conjugation
AU Fowers, Kirk D.; Callahan, Jon; Byron, Parke; Kopecek, Jindrich Ich
CS Departments of Bioengineering, University of Utah, Salt Lake City, UT, 84112, USA
SO Journal of Drug Targeting (2001), 9(4), 281-294
CODEN: JDTAEH; ISSN: 1061-186X
PB Harwood Academic Publishers

DT Journal
LA English
RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Multivalent Thioether-Peptide Conjugates: B Cell
Tolerance of an Anti-Peptide Immune Response
AB Antibodies which bind β2- glycoprotein I (β2GPI) are
associated with antiphospholipid syndrome. Synthetic peptide
mimotopes have been discovered which compete with β2GPI for binding
to selected anti-β2GPI. A thiol-containing linker was attached
to the N-terminus of two cyclic thioether peptide mimotopes,
peptides 1a and 1b. The resulting peptides, with linker attached, were
reacted with two different haloacetylated platforms to prepare four
tetravalent peptide-platform conjugates to be tested
as B cell toleragens. The linker-containing peptides were reacted with
maleimide-derivatized keyhole limpet hemocyanin (KLH) to provide
peptide-KLH conjugates. Peptides 1a and 1b were also
modified by acylation with 3-(4'-hydroxyphenyl)propionic acid
N-hydroxysuccinimidyl ester. The resulting hydroxyphenyl peptides were
radioiodinated and used to measure anti-peptide antibody levels.
The KLH conjugates were used to immunize mice to generate an
anti-peptide immune response. The immunized mice were treated
with the conjugates or saline solution and boosted with the
appropriate peptide-KLH conjugate. Three of the four
conjugates suppressed the formation of anti-peptide
antibody. The stabilities of the conjugates in mouse serum were
measured, and the relative stabilities did not correlate with ability to
suppress antibody formation.
AN 1999:242945 HCAPLUS <<LOGINID::20081107>>
DN 131:72399
TI Multivalent Thioether-Peptide Conjugates: B Cell
Tolerance of an Anti-Peptide Immune Response
AU Jones, David S.; Coutts, Stephen M.; Gamino, Christina A.; Iverson, G.
Michael; Linnik, Matthew D.; Randow, Martina E.; Ton-Nu, Huong-Thu;
Victoria, Edward J.
CS La Jolla Pharmaceutical Company, San Diego, CA, 92121, USA
SO Bioconjugate Chemistry (1999), 10(3), 480-488
CODEN: BCCHES; ISSN: 1043-1802
PB American Chemical Society
DT Journal
LA English
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Improved in vitro growth inhibitory effect of
N-(phosphonacetyl)-L-aspartic acid in immunoliposomes
AB The use of liposome-encapsulated N-(phosphonacetyl)-L-aspartic acid (PALA)
for the possible treatment of human ovarian cancer has been investigated
in vitro. Protein A or tumor-specific antibodies were
conjugated to liposomes via the reaction of a maleimide
derivatized phospholipid (MPB-PE) with a thiol introduced into
the protein by a heterobifunctional crosslinking agent,
N-succimidyl 3-(2-pyridyldithio) propionate (SPDP). Antibody-
conjugated PALA-containing liposomes were separated from free antibodies
by ultracentrifugation in discontinuous metrizamide gradients. PALA in
Protein A-conjugated liposomes was found to be over
400-fold more effective (IC50 = 0.04 μM) than free drug (IC50 = 18
μM) for growth inhibition of L929 cells in vitro, when the cells were

pretreated with 20-40 μg of 11-4.1 monoclonal antibody for 30 min. PALA in tumor-specific antibody-conjugated liposomes was 60-fold more effective (IC50 = 0.2 μM) than free drug (IC50 = 12 μM) for growth inhibition of HEY 1B human ovarian cancer cells. Anti-c-erbB2 antibody (454C11) and anti-trans ferrin receptor antibody (454A12) were particularly effective in this regard. For growth inhibition of SKOV-3 cells, a human ovarian cancer cell line that grows more slowly than HEY 1B, PALA in antibody-conjugated liposomes was also about 60-fold more effective (IC50 = 0.9 μM) than free drug (IC50 = 50 μM). Antibody against a high mol. weight glycoprotein (2G3) and anti-transferrin receptor antibody (454A12) were the most effective antibodies among those tested for their ability to inhibit growth of SKOV-3 cells. These results demonstrate that PALA is a good candidate for drug delivery to ovarian cancer cells by immunoliposomes, and that the c-erbB2 oncogene product, a high mol. weight glycoprotein, and the transferrin receptor are suitable ligands, through which to target the delivery of PALA.

AN 1996:348082 HCAPLUS <<LOGINID::20081107>>
DN 125:95770
OREF 125:17843a
TI Improved in vitro growth inhibitory effect of N-(phosphonacetyl)-L-aspartic acid in immunoliposomes
AU Kim, Jin-Seok; Heath, Timothy D.
CS School of Pharmacy, University of Wisconsin, Madison, WI, 53706, USA
SO Journal of Controlled Release (1996), 40(1-2), 101-109
CODEN: JCREEC; ISSN: 0168-3659
PB Elsevier
DT Journal
LA English

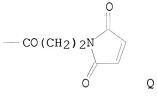
L16 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Method for conjugating nucleotides and nucleosides to disulfide-, maleimide-, and thiol-containing compounds
AB Compds. comprised of an agent linked to a nucleotide, nucleoside, polynucleotide, or analog, thereof, are described. The agent is linked through a sulfur atom bound to a phosphorus atom of a nucleotide, nucleoside, or polynucleotide. For example, a phosphorotioate-containing ester of a nucleotide, nucleoside, polynucleotide, or an analog thereof, can be attached to a maleimide group on an agent through a cyclic thioester linkage. Agents include proteins, glycoproteins, antibodies, antibody fragments, hormones, saccharides or drugs. Antisense oligonucleotide can be linked to an antibody for targeting of the antisense oligonucleotide to a specific cell. In addition, methods for producing the compds. are described. In example, mixed disulfide was formed between phosphorothioate-dideoxyinosine or thymidyl-phosphorothioate-thymidine and Ellman's reagent, cyclic thioester was formed between N-(1-pyrenyl)maleimide and thiophosphoric acid or thymidyl-phosphorothioate-thymidine or 2'-deoxycytosine-5'-O-(1-thiotriphosphate), and 5'-ADP beta-S was reacted with maleimide-modified albumin.

AN 1995:489993 HCAPLUS <<LOGINID::20081107>>
DN 122:237779
OREF 122:43450h,43451a
TI Method for conjugating nucleotides and nucleosides to disulfide-, maleimide-, and thiol-containing compounds
IN Weltman, Joel K.; Karim, Aftab S.
PA USA
SO PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9502422	A1	19950126	WO 1994-US7610	19940712 <--
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	US 1993-91156	A	19930712 <--		
OS	MARPAT 122:237779				

L16 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Tri- and tetra-valent monospecific antigen-binding proteins
GI



AB Tri- or tetravalent monospecific antigen-binding proteins comprising 3 or 4 antibody Fab fragments bound covalently to each other by a connecting structure are prepared A labeling or effector group (e.g. a macrocycle chelating a radioisotope) can be attached and the whole construct can then used in the treatment or diagnosis of, e.g., cancer. NHZ(CH2)4CHZNHCOC[(CH2)4NHZ]HNHZ (Z = benzyloxycarbonyl) was dissolved in DMSO and N-methylmorpholine was added to the solution followed by succinimidyl maleimido propionate in DMSO. The mixture was slightly heated and the resulting product was worked up and purified to give crosslinking agent MalNH(CH2)4CHZNHCOCH[(CH2)4NHMal]NHMal (I; Mal = Q; Z = as above). Chimeric Fab' fragments of monoclonal antibody B72.3 (specific for tumor-associated glycoprotein TAG72), containing a single hinge thiol group, were prepared and crosslinked the tri-maleimide linker I to make a tri-Fab protein. Characterization and biodistribution studies on the tri-Fab protein are described. Other tri- and tetra-maleimide linkers were prepared and characterized as well.

AN 1993:211310 HCAPLUS <<LOGINID::20081107>>
DN 118:211310
OREF 118:36397a,36400a
TI Tri- and tetra-valent monospecific antigen-binding proteins
IN King, David John; Turner, Alison; Beeley, Nigel Robert Arnold; Millican, Thomas Andrew
PA Celltech Ltd., UK
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9222583	A2	19921223	WO 1992-GB1047	19920611 <--
	WO 9222583	A3	19930401		
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	AU 9219716	A	19930112	AU 1992-19716	19920611 <--
	EP 560947	A1	19930922	EP 1992-912329	19920611 <--

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     EP 560947             B1    20000503
        R:  GB
     ZA 9204271            A     19931213    ZA 1992-4271          19920611 <--
     JP 06502657           T     19940324    JP 1992-511083        19920611 <--
     JP 3373849            B2    20030204
     AT 192457             T     20000515    AT 1992-912329        19920611 <--
     ES 2146212            T3    20000801    ES 1992-912329        19920611 <--
     CA 2088367            C     20020820    CA 1992-2088367       19920611 <--
     NO 9300440            A     19930402    NO 1993-440           19930209 <--
     US 6511663            B1    20030128    US 2000-664377        20000918 <--
PRAI GB 1991-12536         A     19910611  <--
     WO 1992-GB1047        A     19920611  <--
     US 1994-232401        B3    19940425  <--
     US 1995-456915        B1    19950601  <--


=> d his

     (FILE 'HOME' ENTERED AT 14:30:32 ON 07 NOV 2008)

     FILE 'HCAPLUS' ENTERED AT 14:30:38 ON 07 NOV 2008
L1           768 S POLYSIALIC ACID
L2         20125 S MALEIMIDE OR IODOACETAMIDE OR VINYLSULPHONE OR (ORTHOPYRIDYL)
L3         20637 S MALEIMIDE OR IODOACETAMIDE OR VINYLSULPHONE OR VINYLSULFONE O
L4             2 S L1 AND L3

     FILE 'REGISTRY' ENTERED AT 14:32:01 ON 07 NOV 2008
                EXP POLYSIALIC/CN
                EXP POLYSIAL/CN

     FILE 'HCAPLUS' ENTERED AT 14:42:43 ON 07 NOV 2008

     FILE 'REGISTRY' ENTERED AT 14:42:47 ON 07 NOV 2008
L5              STRUCTURE UPLOADED
L6             0 S L5
L7             0 S L5 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 14:48:00 ON 07 NOV 2008
L8       2483134 S PROTEIN OR PEPTIDE OR POLYPEPTIDE
L9        217633 S CONJUGATE?
L10        59811 S THIOL
L11          970 S L8 AND L9 AND L10
L12            0 S L1 AND L11
L13       174964 S POLYSACCHARIDE OR GLYCOPROTEIN
L14           38 S L11 AND L13
L15           32 S L14 AND (PY<2004 OR AY<2004 OR PRY<2004)
L16            7 S L3 AND L15

=> log hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    28.44     221.36

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -5.60      -7.20

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:49:49 ON 07 NOV 2008

Connecting via Winsock to STN
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Welcome to STN International!  Enter x:X

LOGINID:SSPTAEXO1623

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 15:20:43 ON 07 NOV 2008
FILE 'HCAPLUS' ENTERED AT 15:20:43 ON 07 NOV 2008
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)f

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      28.44     221.36

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -5.60      -7.20

=> s (N-hydroxysuccinimide) or carbodiimide or
MISSING TERM AFTER BODIIMIDE OR
Operators must be followed by a search term, L-number, or query name.

=> s (N-hydroxysuccinimide) or carbodiimide
       3240039 N
          9112 HYDROXYSUCCINIMIDE
          7771 N-HYDROXYSUCCINIMIDE
                 (N(W)HYDROXYSUCCINIMIDE)
         13236 CARBODIIMIDE
L17      20181 (N-HYDROXYSUCCINIMIDE) OR CARBODIIMIDE

=> s polysaccharide or polysialic
         67865 POLYSACCHARIDE
           794 POLYSIALIC
L18      68557 POLYSACCHARIDE OR POLYSIALIC

=> s l17 and l18
L19        358 L17 AND L18

=> s conjugat?
L20     258682 CONJUGAT?

=> s l19 and l20
L21        145 L19 AND L20

=> s polypeptide or protein
        110434 POLYPEPTIDE
       2226823 PROTEIN
L22    2268580 POLYPEPTIDE OR PROTEIN

=> s l21 and l22
L23         82 L21 AND L22

=> s thiol
L24      59811 THIOL

=> s l23 and l24
L25          0 L23 AND L24
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=> s sial?
L26       49352 SIAL?

=> s l23 and l26
L27           2 L23 AND L26

=> d l27 1-2 ti bs bib
'BS' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
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codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):ti abs bib

L27 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Activated sialic acid derivatives for protein derivatization and conjugation
AB Derivs. of polysialic acids PSAs are synthesized, in which a reducing and/or non- reducing end terminal sialic acid unit is transformed into a N-hydroxysuccinimide (NHS) group. The derivs. may be reacted with substrates, for instance substrates containing amine or hydrazine groups, to form non-crosslinked/crosslinked polysialylated compds. The substrates may, for instance, be therapeutically useful drugs, peptides or proteins, or drug delivery systems.
AN 2006:886313 HCAPLUS <<LOGINID::20081107>>
DN 145:273580
TI Activated sialic acid derivatives for protein derivatization and conjugation
IN Jain, Sanjay; Papaioannou, Ioannis; Thobhani, Smita
PA Lipoxen Technologies Limited, UK
SO PCT Int. Appl., 61pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006090119	A1	20060831	WO 2006-GB540	20060216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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WO 2006016168	A2	20060216	WO 2005-GB3160	20050812
WO 2006016168	A3	20060504		
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     EP 1853634          A1    20071114    EP 2006-709777         20060216
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     JP 2008531764       T     20080814    JP 2007-555696         20060216
     IN 2007DN06400      A     20070831    IN 2007-DN6400         20070817
     US 20080262209      A1    20081023    US 2007-816823         20070821
     CN 101160326        A     20080409    CN 2006-80012749       20071017
PRAI EP 2005-251017      A     20050223
     WO 2005-GB3160      A     20050812
     WO 2004-GB3488      A     20040812
     EP 2005-251015      A     20050223
     WO 2006-GB540       W     20060216
OS   MARPAT 145:273580
RE.CNT  9      THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27  ANSWER 2 OF 2  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Sialic acid derivatives
AB   An amine or hydrazide derivative of a sialic acid unit, e.g. in a
     polysaccharide, is reacted with a bifunctional reagent at least
     one of the functionalities of which is an ester of N-hydroxy succinimide,
     to form an amide or hydrazide product.  The product has a useful
     functionality, which allows it to be conjugated, for instance to
     proteins, drugs, drug delivery systems or the like.  The process is of
     particular utility for derivatizing amine groups introduced in
     sialic acid terminal groups of polysialic acids.
AN   2006:152761  HCAPLUS <<LOGINID::20081107>>
DN   144:214632
TI   Sialic acid derivatives
IN   Jain, Sanjay; Papaioannou, Ioannis; Thobhani, Smita
PA   Lipoxen Technologies Limited, UK
SO   PCT Int. Appl., 51 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 3
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 2006016168       A2     20060216    WO 2005-GB3160         20050812
     WO 2006016168       A3     20060504
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            NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
            SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
            ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
     WO 2005016973       A1     20050224    WO 2004-GB3488         20040812
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     CN 101039965        A     20070919    CN 2005-80034588        20050812
     JP 2008510025       T     20080403    JP 2007-525356          20050812
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            VN, YU, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
     EP 1853634          A1    20071114    EP 2006-709777          20060216
        R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
     JP 2008531764       T     20080814    JP 2007-555696          20060216
     IN 2007DN01100      A     20070427    IN 2007-DN1100          20070209
     US 20070282096      A1    20071206    US 2007-660128          20070713
     US 20080262209      A1    20081023    US 2007-816823          20070821
     CN 101160326        A     20080409    CN 2006-80012749        20071017
PRAI WO 2004-GB3488      A     20040812
     EP 2005-251015      A     20050223
     EP 2003-254988      A     20030812
     EP 2003-255200      A     20030821
     EP 2005-251017      A     20050223
     WO 2005-GB3160      W     20050812
     WO 2006-GB540       W     20060216
OS   MARPAT 144:214632


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       4499497 AY<2003
       3967905 PRY<2003
L28         62 L23 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d l28 1-62 ti

L28  ANSWER 1 OF 62  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation of aldonic acid esters of polysaccharides for use as
     pharmaceutical delivery agents coupled on free amino groups

L28  ANSWER 2 OF 62  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Oxime conjugates of polyketals from dextran and macromolecules

L28  ANSWER 3 OF 62  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Development of pneumococcal capsular polysaccharide type
     14-tetanus toxoid conjugate vaccines

L28  ANSWER 4 OF 62  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Methods for detecting a plurality of analytes by chromatography
```

L28 ANSWER 5 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunogenicity of group A meningococcal polysaccharide conjugate

L28 ANSWER 6 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Influence on the immune response of the size of spacer used in the covalent binding of a polysaccharide to a protein

L28 ANSWER 7 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Chemical modifications of 1→4-2-amino-2-deoxy-α-D-galactan

L28 ANSWER 8 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Carrier systems comprising vitamin B12-biodegradable microparticulate conjugates for peroral delivery of drugs, peptides/proteins and vaccines

L28 ANSWER 9 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Invertase stabilization by chemical modification of sugar chains with carboxymethylcellulose

L28 ANSWER 10 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Capsular polysaccharide conjugate vaccines against contagious bovine pleuropneumoniae: Immune responses and protection in mice

L28 ANSWER 11 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Formulation and characterization of Bordetella pertussis fimbriae as novel carrier proteins for Hib conjugate vaccines

L28 ANSWER 12 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Evaluation of synthetic schemes to prepare immunogenic conjugates of Vibrio cholerae O139 capsular polysaccharide with chicken serum albumin

L28 ANSWER 13 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Advances in Conjugate Vaccines: Development of Vi-rEPA for Typhoid Fever

L28 ANSWER 14 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation and preclinical evaluation of experimental group B streptococcus type III polysaccharide-cholera toxin B subunit conjugate vaccine for intranasal immunization

L28 ANSWER 15 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Chemical conjugation between Haemophilus influenzae type b (Hib) polysaccharide and proteins

L28 ANSWER 16 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Purification of polysaccharide-protein conjugate vaccines by ultrafiltration with ammonium sulfate solutions

L28 ANSWER 17 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation and the immunogenicity of the conjugate made from group A capsular polysaccharide and group B outer membrane protein complex of Neisseria meningitidis

L28 ANSWER 18 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Activation of soluble polysaccharides with 1-cyano-4-dimethylaminopyridinium tetrafluoroborate (CDAP) for use in

protein-polysaccharide conjugate vaccines and immunological reagents. II. Selective crosslinking of proteins to CDAP-activated polysaccharides

L28 ANSWER 19 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Improvement of the physical properties of pepsin-solubilized elastin-collagen film by crosslinking

L28 ANSWER 20 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Interfacial recognition of sugars by boronic acid-carrying self-assembled monolayer

L28 ANSWER 21 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Selective and restricted depolymerization of microbial polysaccharides for preparation of conjugate vaccines

L28 ANSWER 22 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI A new method of non-crosslinking conjugation of polysaccharides to proteins via thioether bonds for the preparation of saccharide-protein conjugate vaccines

L28 ANSWER 23 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Meningococcal group C capsular polysaccharide/tetanus toxoid conjugate vaccine. I. Preparation and purification

L28 ANSWER 24 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI IgG immunoglobulins and F(ab')2 fragments thereof, specific for drugs and metabolites thereof, and their use for detoxification purposes

L28 ANSWER 25 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Method of producing immunogenic products and vaccines

L28 ANSWER 26 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis and immunological properties of Vi and Di-O-acetyl pectin protein conjugates with adipic acid dihydrazide as the linker

L28 ANSWER 27 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Stroma-derived stem cell proteoglycan growth factor

L28 ANSWER 28 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunogenic and immunostimulatory oligosaccharide compositions and methods of making and using them

L28 ANSWER 29 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Functional improvement of alginic acid by conjugating with β-lactoglobulin

L28 ANSWER 30 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation and immunogenicity of S flexneri 2a polysaccharide-protein conjugate

L28 ANSWER 31 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Simplified procedure for preparation of sensitized latex particles to detect capsular polysaccharides: Application to typing and diagnosis of Actinobacillus pleuropneumoniae

L28 ANSWER 32 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Pharmaceutical liposomes comprising hydrophilic polymer conjugates with polypeptides or polysaccharides

L28 ANSWER 33 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation, characterization, and immunological properties in mice of Escherichia coli O157 O-specific polysaccharide-protein conjugate vaccines

L28 ANSWER 34 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of cell-adhesive peptide bonded to polysaccharides

L28 ANSWER 35 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Pertussis toxin used as a carrier protein with noncharged saccharides in conjugate vaccines

L28 ANSWER 36 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI System for delivery of diagnostic or therapeutic agents to the lymphatic tissues

L28 ANSWER 37 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunogenicity of Actinobacillus actinomycetemcomitans serotype b-specific polysaccharide antigen-bovine serum albumin conjugate

L28 ANSWER 38 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Functional changes of lysozyme by conjugating with carboxymethyl dextran

L28 ANSWER 39 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunogenicity of Vibrio vulnificus capsular polysaccharides and polysaccharide-protein conjugates

L28 ANSWER 40 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunogenicity of a Streptococcus pneumoniae type 4 polysaccharide -protein conjugate vaccine is decreased by admixture of high doses of free saccharide

L28 ANSWER 41 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation, characterization, and immunogenicity of conjugate vaccines directed against Actinobacillus pleuropneumoniae virulence determinants

L28 ANSWER 42 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunogenicity of S. sonnei polysaccharide-protein conjugate

L28 ANSWER 43 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Partially cationized antigens, and their use in immunization

L28 ANSWER 44 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Heterobifunctional reagents and conjugates with oxaalkylene units for amphiphilic bridge structures

L28 ANSWER 45 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Comparative immunogenicity of conjugates composed of the Staphylococcus aureus type 8 capsular polysaccharide bound to carrier proteins by adipic acid dihydrazide or N-succinimidyl-3-(2-pyridyldithio)propionate

L28 ANSWER 46 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Pneumococcal conjugate vaccines

L28 ANSWER 47 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Method for assay of polynucleotides, polypeptides, or other biopolymers using replicative RNA reporter systems

L28 ANSWER 48 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunoreactant carriers having a novel biocompatible intermediate coating and process of making same

L28 ANSWER 49 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Biodegradable protein-polysaccharide hydrogel matrixes for the controlled release of pharmacologically active agents

L28 ANSWER 50 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis and characterization of Escherichia coli O18 O-polysaccharide conjugate vaccines

L28 ANSWER 51 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Modulation of the immune response to pneumococcal type 14 capsular polysaccharide-protein conjugates by the adjuvant Quil A depends on the properties of the conjugates

L28 ANSWER 52 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Chemical stabilization of glucoamylase from Aspergillus niger against thermal inactivation

L28 ANSWER 53 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Vaccine for gram-negative bacteria, especially Pseudomonas aeruginosa, and method for its production

L28 ANSWER 54 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI O-Polysaccharide-protein conjugates induce high levels of specific antibodies to Pseudomonas aeruginosa immunotype 3 lipopolysaccharide

L28 ANSWER 55 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Haemophilus influenzae type b polysaccharide-protein conjugate vaccine

L28 ANSWER 56 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Consequences of the use of N-ethyl-N'-(3-dimethylaminopropyl) carbodiimide for the preparation of meningococcal group A and C polysaccharide-tetanus toxoid conjugates as vaccines for human use

L28 ANSWER 57 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Reduction in non-specific interference in hydrophobic ligand assays

L28 ANSWER 58 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation and identification of a population of antibodies that recognize carbodiimide-modified heparin

L28 ANSWER 59 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Haemophilus influenzae b polysaccharide exotoxoid conjugate vaccine

L28 ANSWER 60 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Tissue-binding macromolecular antitumor drugs for localized therapy: mitomycin C-concanavalin A conjugates

L28 ANSWER 61 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Further studies on the immunogenicity of Haemophilus influenzae type b and pneumococcal type 6A polysaccharide-protein conjugates

```
L28  ANSWER 62 OF 62  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation and immunochemical characterization of meningococcal group C
     polysaccharide-tetanus toxoid conjugates as a new
     generation of vaccines


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FULL ESTIMATED COST                                    78.10     271.02

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L28  ANSWER 3 OF 62  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Development of pneumococcal capsular polysaccharide type
     14-tetanus toxoid conjugate vaccines
AB   The reactive conditions for preparing PNCPS-protein
     conjugates were studied to collect experiences in the development
     of conjugate vaccines afterwards.  14-TT conjugates
     were prepared by carbodiimide-mediated coupling of PNCPS with
     tetanus toxoid(TT).  Female NIH mice were immunized with
     conjugates or pure PNCPS type 14, and the PNCPS antibodies in the
     sera of animals were detected by ELISA.  The yield and composition of the
     conjugates tests showed that there are PNCPS and TT in
     conjugates.  All of the conjugates elicited high level
     antibody response and induced immunogenic memory in mice, comparing to
     pure PNCPS.  14-TT conjugates were successfully prepared with
     feasible technol.
AN   2003:597154  HCAPLUS <<LOGINID::20081107>>
DN   140:57981
TI   Development of pneumococcal capsular polysaccharide type
     14-tetanus toxoid conjugate vaccines
AU   Tan, Ningzhi; Li, Kexi; Liu, Yuqing; Feng, Xiaohu; Cai, Qin; Yu, Wensan
CS   Unit of Hygiene Toxicology, Sichuan University, Chengdu, 610041, Peop.
     Rep. China
SO   Zhonghua Weishengwuxue He Mianyixue Zazhi (2002), 22(6), 625-628
     CODEN: ZWMZDP; ISSN: 0254-5101
PB   Beijing Shengwu Zhipin Yanjiuso
DT   Journal
LA   Chinese

L28  ANSWER 5 OF 62  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Immunogenicity of group A meningococcal polysaccharide
     conjugate
AB   The group A meningococcal polysaccharide (P5)-protein
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conjugate was synthesized and its immunogenicity was studied. Conjugate was prepared by carbodiimide-mediated coupling of adipic acid hydrazide derivs. of capsular polysaccharides of group A meningococcal with tetanus toxoid (TT). NIH mice were immunized with conjugate, PS or TT alone, and the anti-PS and anti-TT antibodies were determined by ELISA. The conjugate vaccine kept the antigenicities of PS and TT. High titers of anti-PS antibody were elicited in immunized mice, and could last for at least 3 wk after the second injection. The anti-PS antibody in immunized mice sera could be neutralized by polysaccharide. Immunol. memory was detected as well. Anti-TT antibodies could also be induced. These results show that The immunogenicity of group A meningococcal polysaccharide in conjugate has been greatly improved in mice, which has laid a foundation for preparation of conjugate vaccine and for evaluation of its immunogenicity in human infants.

AN 2003:124382 HCAPLUS <<LOGINID::20081107>>
DN 138:367257
TI Immunogenicity of group A meningococcal polysaccharide conjugate
AU Zhu, Wei; Yin, Xing; Yu, Shengling; Bi, Hui; Huang, Guoying; Jin, Ming; Yu, Baozhen; Xu, Yuzhong; Cao, Jie; Chen, Zhewen; He, Xiangkun
CS Shanghai Institute of Biological Products, Shanghai, 200052, Peop. Rep. China
SO Zhonghua Weishengwuxue He Mianyixue Zazhi (2002), 22(3), 299-302
CODEN: ZWMZDP; ISSN: 0254-5101
PB Weishenbu Beijing Shengwu Zhipin Yanjiuso
DT Journal
LA Chinese

L28 ANSWER 6 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Influence on the immune response of the size of spacer used in the covalent binding of a polysaccharide to a protein
AB The spacer arms are organic chemical reagents that present useful functional groups for the covalent union with other mols. Up to now there are several that are used for the union of two antigens with the objective of increasing the immunogenicity of at least one of them. The influence on immune response of spacer arms with different size used in N. meningitidis serogroup C polysaccharide (PMGC)-tetanus toxoid (TT) conjugates was evaluated in Balb/c mice. 1,3-Diaminopropane, 1,6-diaminohexane, and 1,8-diaminooctane were used as spacer arms of different size, linked to PMGC and TT by using carbodiimide -mediated coupling. The generation of IgM anti-PMGC, IgG anti-PMGC and IgG anti-TT were evaluated in serum from animals by an indirect ELISA. Also IgG subclasses (IgG1 and IgG2a) of anti-PMGC were evaluated. The IgG antibody response of conjugate inoculated was significantly higher than native polysaccharide and this response was size spacer dependent, being significantly higher with 1,8-diaminooctane; a statistically significant increase of IgG2a subclasses was also found in this group. These data suggest that immune response was developed by induction of cellular pattern. The IgG antibody response of conjugate was significantly higher than native TT, although significant differences among spacers were not found.
AN 2002:969374 HCAPLUS <<LOGINID::20081107>>
DN 138:168376
TI Influence on the immune response of the size of spacer used in the covalent binding of a polysaccharide to a protein
AU Cuello, Maribel; Cabrera, Osmir; Perez, Oliver; Del Campo, Judith; Soto, Carmen R.; Martinez, Miguel E.; Hernandez, Jonatan; Sierra, Gustavo
CS Instituto Finlay, Havana, Cuba
SO Revista CENIC, Ciencias Biologicas (2002), 33(2), 71-75
CODEN: RCCBEG; ISSN: 0253-5688

PB Centro Nacional de Investigaciones Cientificas
DT Journal
LA Spanish
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 10 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Capsular polysaccharide conjugate vaccines against contagious bovine pleuropneumoniae: Immune responses and protection in mice
AB The immunogenicity of Mycoplasma mycoides subsp. mycoides small colony biotype (MmmSC) vaccines was investigated in BALB/c mice. Groups of mice were vaccinated with either (1) unconjugated capsular polysaccharide (CPS), (2) CPS covalently conjugated to ovalbumin via a carbodiimide reaction, (3) CPS non-covalently bound to latex microspheres, (4) CPS non-covalently complexed with rabbit anti-CPS IgG, and (5) whole inactivated, ultrasonically disrupted (WID) MmmSC. Only mice immunized with the CPS-ovalbumin conjugate exhibited a significant antibody response against CPS. Mice immunized with WID vaccine exhibited a high ELISA antibody titer against non-CPS (protein) antigens only. Mice given WID vaccine were immune against challenge with live MmmSC, and exhibited a significantly reduced degree of mycoplasmemia (both in incidence and duration) as compared with non-vaccinated controls. Mice immunized with the CPS-ovalbumin conjugate did not exhibit a reduction in mycoplasmemia. The bactericidal activity of rabbit MmmSC-antiserum in an in-vitro growth inhibition test was related to the CPS antibody titer. This was not observed with antisera from the vaccinated mice. None of the mouse antisera exhibited growth inhibiting activity, irresp. of a high CPS or protein antibody titer (CPS-ovalbumin or WID vaccine groups, resp.). Thus, it would seem that protection against an MmmSC-induced mycoplasmemia in the mouse is based upon cell-mediated rather than humoral immunity. The results suggest that conjugation to ovalbumin significantly increases the antibody response to CPS in the mouse; the lack of bactericidal activity of mouse anti-CPS as compared with rabbit anti-CPS in vitro suggests either that the titer of growth inhibiting antibodies is lower in the mouse or that the mechanism of growth inhibition differs between antibodies of the two species.
AN 2002:419640 HCAPLUS <<LOGINID::20081107>>
DN 137:230995
TI Capsular polysaccharide conjugate vaccines against contagious bovine pleuropneumoniae: Immune responses and protection in mice
AU Waite, E. R.; March, J. B.
CS Moredun Research Institute, Midlothian, EH26 0PZ, UK
SO Journal of Comparative Pathology (2002), 126(2-3), 171-182
CODEN: JCVPAR; ISSN: 0021-9975
PB W. B. Saunders
DT Journal
LA English
RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 11 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Formulation and characterization of Bordetella pertussis fimbriae as novel carrier proteins for Hib conjugate vaccines
AB Haemophilus influenzae type b (Hib) capsular polysaccharide (polyribosylribitol phosphate, PRP) is the active component of conjugate vaccines that have proven successful in preventing invasive Hib disease. Conjugation of PRP to a protein carrier greatly improves its immunogenicity providing protection in

infants and subsequent antibody maturation upon boosting. In this study, fimbriae isolated from Bordetella pertussis have been assessed as novel carrier proteins. These proteins are components of some acellular pertussis vaccines and clin. trials have indicated that fimbriae could be important protective antigens against whooping cough. Fimbriae (Fim2 and Fim3) purified from B. pertussis were dissociated in 6 M guanidine hydrochloride, pH 10.5, to produce proteins of defined size and to facilitate the production and characterization of the conjugates. Both carbodiimide-mediated coupling and reductive amination were used to conjugate PRP to dissociated fimbriae. Efficiency of conjugation was determined by size exclusion chromatog. followed by protein and polysaccharide anal. of fractionated components. Immunization of rabbits with dissociated fimbriae-PRP conjugates (D.fim-PRP) produced high anti-fimbrial and anti-PRP IgG titers. Use of a D.fim-PRP conjugate could protect against Hib disease and may also augment protection against B. pertussis.

AN 2001:334007 HCAPLUS <<LOGINID::20081107>>
DN 136:221575
TI Formulation and characterization of Bordetella pertussis fimbriae as novel carrier proteins for Hib conjugate vaccines
AU Crowley-Luke, A.; Reddin, K.; Gorringe, A.; Hudson, M. J.; Robinson, A.
CS Centre for Applied Microbiology and Research, Salisbury, SP4 0JG, UK
SO Vaccine (2001), 19(25-26), 3399-3407
CODEN: VACCDE; ISSN: 0264-410X
PB Elsevier Science Ltd.
DT Journal
LA English
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 12 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Evaluation of synthetic schemes to prepare immunogenic conjugates of Vibrio cholerae O139 capsular polysaccharide with chicken serum albumin
AB Vibrio cholerae serotype O139 is a new etiol. agent of epidemic cholera. There is no vaccine available against cholera caused by this serotype. V. cholerae O139 is an encapsulated bacterium, and its polysaccharide capsule is an essential virulent factor and likely protective antigen. This study evaluated several synthetic schemes for preparation of conjugates of V. cholerae O139 capsular polysaccharide (CPS) with chicken serum albumin as the carrier protein (CSA) using 1-ethyl-3(3-dimethylaminopropyl)carbodiimide (EDC) or 1-cyano-4-dimethylaminopyridinium tetrafluoroborate (CDAP) as activating agents. Four conjugates described here as representative of many expts. were synthesized in 2 steps: preparation of adipic acid hydrazide derivative of CPS (CPSAH) or of CSA (CSAAH), and binding of CPSAH to CSA or of CPS to CSAAH. Although all conjugates induced CPS antibodies, the conjugate prepared by EDC-mediated binding of CPS and CSAAH (EDC:CPS-CSAAH) was statistically significantly less immunogenic than the other three conjugates. Representative sera from mice injected with these three conjugates contained antibodies that mediated the lysis of V. cholerae O139 inoculum. Evaluation of the different synthetic schemes and reaction conditions in relation to the immunogenicity of the resultant conjugates provided the basis for the preparation of a V. cholerae O139 conjugate vaccine with a medically useful carrier protein such as diphtheria toxin mutant.
AN 2001:222838 HCAPLUS <<LOGINID::20081107>>
DN 134:352046
TI Evaluation of synthetic schemes to prepare immunogenic conjugates of Vibrio cholerae O139 capsular polysaccharide with chicken

serum albumin
AU Kossaczka, Zuzana; Szu, Shousun C.
CS Laboratory of Developmental and Molecular Immunity, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD, 20892, USA
SO Glycoconjugate Journal (2001), Volume Date 2000, 17(6), 425-433
CODEN: GLJOEW; ISSN: 0282-0080
PB Kluwer Academic Publishers
DT Journal
LA English
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 14 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation and preclinical evaluation of experimental group B streptococcus type III polysaccharide-cholera toxin B subunit conjugate vaccine for intranasal immunization
AB Streptococcus group B (GBS) is usually carried asymptomatically in the vaginal tract of women and can be transferred to the newborn during parturition. Serum antibodies to the capsular polysaccharide (CPS) can prevent invasive diseases, whereas immunity acting at the mucosal surface may be more important to inhibit the mucosal colonization of GBS and thus the risk of infection for the newborn. We prepared different GBS type III CPS-protein conjugate vaccines and evaluated their systemic and mucosal immunogenicity in mice. GBS type III CPS was conjugated to tetanus toxoid (TT) or recombinant cholera toxin B subunit (rCTB) either directly or to rCTB indirectly via TT. The conjugation was performed by different methods: (1) CPS was coupled to TT with 1-ethyl-3 (3-dimethylaminopropyl)-carbodiimide (EDAC), using adipic acid dihydrazide (ADH) as a spacer; (2) CPS was conjugated with rCTB using reductive amination; or, (3) N-succinimidyl 3-(2-pyridyldithio) propionate (SPDP) was used to bind rCTB to the TT of the CPS-TT conjugate. Mice were immunized with these conjugates or purified CPS by s.c. and intranasal (i.n.) routes. Antibodies to GBS III in serum, lungs and vagina were measured with ELISA. All of the CPS-protein conjugates were superior to unconjugated CPS in eliciting CPS-specific immune responses in serum and mucosal tissue exts. The conjugates, when administered s.c., induced only IgG responses in serum, lung and vagina, while i.n. vaccination also elicited IgA responses in the lungs and vagina. The CPS-TT conjugate administered i.n. induced a strong serum IgG, but only a weak mucosal IgA response, while the CPS-rCTB conjugate elicited high IgG as well as IgA antibodies in the lungs after i.n. immunization. GBS III CPS-TT conjugated with rCTB produced a strong systemic and local anti-CPSIII response after i.n. administration. Co-administration of CT as adjuvant enhanced the anti-CPS systemic and mucosal immune responses further after i.n. administration with the CPS conjugates. These findings indicate that: (i) i.n. immunization with GBS CPS-protein conjugates was more effective than s.c. immunization for stimulating serum as well as mucosal immune responses; (ii) rCTB as a carrier protein for GBS III CPS could markedly improve the mucosal immune response; and (iii) the exptl. GBS type III CPS conjugates containing rCTB should be investigated as mucosal vaccine to prevent GBS infection in humans.
AN 2000:874738 HCAPLUS <<LOGINID::20081107>>
DN 135:136084
TI Preparation and preclinical evaluation of experimental group B streptococcus type III polysaccharide-cholera toxin B subunit conjugate vaccine for intranasal immunization
AU Shen, X.; Lagergard, T.; Yang, Y.; Lindblad, M.; Fredriksson, M.;

Holmgren, J.
CS Department of Medical Microbiology and Immunology, Goteborg University, Goteborg, S-413 46, Swed.
SO Vaccine (2000), 19(7-8), 850-861
CODEN: VACCDE; ISSN: 0264-410X
PB Elsevier Science Ltd.
DT Journal
LA English
RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 15 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Chemical conjugation between Haemophilus influenzae type b (Hib) polysaccharide and proteins
AB Haemophilus influenzae b polysaccharide (Hib-PS) protein conjugate vaccines differ chemical and immunol. Activated Hib-PS was conjugated with different proteins by carbodiimide -mediated condensation. The carrier proteins used were diphtheria toxin or meningococcic vaccine. The immunol. activity of Hib-PS protein conjugate was tested in mice at three doses. The test showed that Hib-PS protein conjugate has significant immunol. responses after the first immunization.
AN 2000:842852 HCAPLUS <<LOGINID::20081107>>
DN 135:18241
TI Chemical conjugation between Haemophilus influenzae type b (Hib) polysaccharide and proteins
AU Lei, Ping-Sheng; Lu, Gui-Shen
CS Institute of Material Medical, Chinese Academy of Medical Sciences, Beijing, 100050, Peop. Rep. China
SO Peptides: Biology and Chemistry, Proceedings of the Chinese Peptide Symposium, 5th, Lanzhou, China, July 14-17, 1998 (2000), Meeting Date 1998, 145-146. Editor(s): Hu, Xiao-Yu; Wang, Rui; Tam, James P. Publisher: Kluwer Academic Publishers, Dordrecht, Neth.
CODEN: 69AQX6
DT Conference
LA English
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 17 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation and the immunogenicity of the conjugate made from group A capsular polysaccharide and group B outer membrane protein complex of Neisseria meningitidis
AB Objective: To prepare the conjugate of group A capsular polysaccharide (ACPS) and outer membrane protein complexes (OMPC) of Neisseria meningitidis (Nm) and to study its immunogenicity was OMPC purified from the strain 3407 or 542852. Methods OMPC was purified on Sephacryl S-300 HR after the cultural supernatants were precipitated by 70% ammonium sulfate. ACPS was conjugated to OMPC of serogroup B (BOMPC) by carbodiimide mediated condensation. Mice were resp. immunized by the conjugates, unconjugated ACPS, BOMPC and simple mixture of ACPS and BOMPC in the same procedure, then the immunogenicity of the conjugates was determined by ELISA, bactericidal test and Western blotting. Results: The immunogenicity of the conjugates was enhanced by 21 to 320 times as large as the unconjugated ACPS or the simple mixture of ACPS and BOMPC. The effect of conjugation of ACPS to the strain 3407 OMPC was better than that to the strain 542852 OMPC. Antisera evoked by BOMPC-ACPS conjugates not only possessed a stronger bactericidal activity to the serogroup A strains (29019) and the serogroup B strains (3407, 542852, 29021) but also showed broadly cross-reactions to other eight serogroup B

strains of different bacterial types. It was primarily found by Western blotting anal. that the sera elicited by the above conjugates obviously reacted with M r42000, 39000 and 26000 proteins in OMPC. Among the reactive bands, the 42kD protein was class I OMP. Conclusion: The above conjugates not only possessed strong immunogenicity of Nm serogroup A and serogroup B but also enhanced the immunogenicity of ACPS to mice.

AN 2000:338530 HCAPLUS <<LOGINID::20081107>>
DN 133:280294
TI Preparation and the immunogenicity of the conjugate made from group A capsular polysaccharide and group B outer membrane protein complex of Neisseria meningitidis
AU Sun, Yinyan; Hu, Xujing
CS Institute of Epidemiology and Microbiology, Chinese Academy of Preventive Medicine, Beijing, 102206, Peop. Rep. China
SO Zhonghua Weishengwuxue He Mianyixue Zazhi (2000), 20(2), 152-155
CODEN: ZWMZDP; ISSN: 0254-5101
PB Weishenbu Beijing Shengwu Zhipin Yanjiuso
DT Journal
LA Chinese

L28 ANSWER 22 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI A new method of non-crosslinking conjugation of polysaccharides to proteins via thioether bonds for the preparation of saccharide-protein conjugate vaccines
AB Bacterial polysaccharides, including capsular polysaccharides, are poor immunogens particularly in young infants. However, conjugation of bacterial polysaccharides to immunogenic carrier proteins generally results in conjugates that induce strong antipolysaccharide T-helper-cell dependent immune responses, also in young infants. The magnitude of the response and the extent of the T-helper-cell dependency is related to the chemical characteristics of the particular conjugate such as presence or absence of polysaccharide-protein crosslinking, presence or absence of spacer arms, character of spacer arms, type of carrier protein, size of conjugated polysaccharide hapten and molar degree of substitution. In the present study a new, general and simple method for the preparation of poly- and oligosaccharide-protein conjugates is presented. This new method is based on spacer-introducing chemical that allows for conjugation of a model polysaccharide, dextran, ranging in size from 0.5 to 150 kDa, to tetanus toxoid (TTd). The developed conjugation method involves derivatization of polysaccharide with 2-iminothiolane (2-IT) and activation of carrier protein, such as TTd, with N-hydroxysuccinimide ester of bromoacetic acid. Reaction rates and accordingly the substitution of the conjugates, could be controlled by varying time, pH and concentration of the reactants. Unlike direct reductive amination, the 2-IT based conjugation technol. is fast and made it possible to couple fairly large polysaccharides to TTd.
AN 1999:234182 HCAPLUS <<LOGINID::20081107>>
DN 131:78311
TI A new method of non-crosslinking conjugation of polysaccharides to proteins via thioether bonds for the preparation of saccharide-protein conjugate vaccines
AU Pawlowski, Andrzej; Kallenius, Gunilla; Svenson, Stefan B.
CS Department of Bacteriology, Swedish Institute for Infectious Disease Control, Stockholm, S-105 21, Swed.
SO Vaccine (1999), 17(11-12), 1474-1483
CODEN: VACCDE; ISSN: 0264-410X
PB Elsevier Science Ltd.

DT Journal
LA English
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 30 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation and immunogenicity of S flexneri 2a polysaccharide-protein conjugate
AB Polysaccharide (PS) derived from Shigella flexneri 2a lipopolysaccharide (LPS) was covalently coupled to diphtheria toxoid (DT) by using adipic acid dihydrazide as a spacer mol. in the presence of carbodiimide. Immunization of rabbits revealed that the conjugate elicited higher F2a LPS antibody levels than the PS alone. A clear anti-LPS booster effect was induced by the conjugate. Anal. of antiserum showed that the antibody was reactive with serogroup A, C, D.
AN 1996:269625 HCAPLUS <<LOGINID::20081107>>
DN 124:340423
OREF 124:63205a,63208a
TI Preparation and immunogenicity of S flexneri 2a polysaccharide-protein conjugate
AU Xu, Xiaoping; Chen, Zhihua; Su, Xin; Gao, Jieying
CS Inst. of Microbiology and Epidemiology, Acad. of Military Med. Sci., Beijing, 100850, Peop. Rep. China
SO Junshi Yixue Kexueyuan Yuankan (1995), 19(4), 274-7
CODEN: JYKYEL; ISSN: 1000-5501
PB Junshi Yixue Kexueyuan Yuankan Bianjibu
DT Journal
LA Chinese

L28 ANSWER 33 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation, characterization, and immunological properties in mice of Escherichia coli O157 O-specific polysaccharide-protein conjugate vaccines
AB E. coli O157 causes severe enteritis and the extraintestinal complication of hemolytic-uremic syndrome, with their highest incidence occurring in children. The authors postulated that serum IgG antibodies to the O-specific polysaccharide of lipopolysaccharide (LPS) may confer protective immunity to enteric pathogens by inducing bactericidal reactions against the ingested organisms in the jejunum (J. B. Robbins, et al., 1992; S. C. Szu, et al., 1994). Because polysaccharide-protein conjugates induce serum IgG antibodies in infants, the authors bound the O-specific polysaccharide of E. coli O157 to proteins. E. coli O157 LPS, treated with acetic acid or hydrazine, was derivatized with adipic acid dihydrazide and bound to proteins by carbodiimide-mediated condensation. Conjugates of these adipic hydrazide derivative were prepared with bovine serum albumin, formalin-treated exotoxin C of Clostridium welchii (Pig Bel toxoid), or Pseudomonas aeruginosa recombinant exoprotein A. The conjugates had low levels of endotoxin and elicited serum antibodies with bactericidal activity to the O157 LPS. The largest increase in LPS antibodies was of the IgG class.
AN 1994:678446 HCAPLUS <<LOGINID::20081107>>
DN 121:278446
OREF 121:50819a,50822a
TI Preparation, characterization, and immunological properties in mice of Escherichia coli O157 O-specific polysaccharide-protein conjugate vaccines
AU Konadu, Edward; Robbins, John B.; Shiloach, Joseph; Bryla, Dolores A.; Szu, Shousun
CS Lab. Dev. Mol. Immunity, Natl. Inst. Child Health Human Dev. Biotechnol.

Unit, Bethesda, MD, 20892, USA
SO Infection and Immunity (1994), 62(11), 5048-54
CODEN: INFIBR; ISSN: 0019-9567
PB American Society for Microbiology
DT Journal
LA English

L28 ANSWER 39 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunogenicity of Vibrio vulnificus capsular polysaccharides and polysaccharide-protein conjugates
AB Opaque colony morphol. has been correlated to V. vulnificus virulence. However, the number of capsular serotypes expressed by virulent isolates is unknown. In an effort to produce anticapsule sera, capsular polysaccharide (CPS) from 3 opaque V. vulnificus strains was purified and characterized. Purified CPSs were acidic and contained considerable amts. of hexosamine and trace quantities of protein and nucleic acid. CPS purified from strain C7184 was poorly immunogenic for rabbits and mice, since repeated injection produced little detectable anticapsular antibody. To improve immunogenicity, CPS-protein conjugates were prepared from adipic acid hydrazide derivs. of CPS purified from each strain and carbodiimide as a coupling reagent. The immunogenicity of C7184 CPs was enhanced by conjugation to keyhole limpet hemocyanin, since injection into mice elicited production of anticapsular antibodies, the level of which was dependent on the dose and time since initial immunization. Injection of rabbits with CPS-protein conjugates also produced anticapsular antibodies. The cells of Staphylococcus aureus armed with each of the 3 anticapsular antibodies coagglutinated only the homologous opaque strain, indicating the existence of at least 3 capsular types. Further screening of 32 opaque and translucent V. vulnificus isolates revealed only 3 cross-reacting strains. These results suggest the presence of numerous V. vulnificus capsular types.
AN 1993:426520 HCAPLUS <<LOGINID::20081107>>
DN 119:26520
OREF 119:4917a,4920a
TI Immunogenicity of Vibrio vulnificus capsular polysaccharides and polysaccharide-protein conjugates
AU Simonson, Janet G.; Siebeling, Ronald J.
CS Dep. Microbiol., Louisiana State Univ., Baton Rouge, LA, 70803, USA
SO Infection and Immunity (1993), 61(5), 2053-8
CODEN: INFIBR; ISSN: 0019-9567
DT Journal
LA English

L28 ANSWER 41 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation, characterization, and immunogenicity of conjugate vaccines directed against Actinobacillus pleuropneumoniae virulence determinants
AB Conjugate vaccines were prepared in an attempt to protect pigs against swine pleuropneumonia induced by A. pleuropneumoniae (SPAP). Two subunit conjugates were prepared by coupling the A. pleuropneumoniae 4074 serotype 1 capsular polysaccharide (CP) to the hemolysin protein (HP) and the lipopolysaccharide (LPS) to the HP. Adipic acid dihydrazide was used as a spacer to facilitate the conjugation in a carbodiimide-mediated reaction. The CP and the LPS were found to be covalently coupled to the HP in the conjugates as determined by SDS-PAGE and detergent gel chromatog. analyses. Following a booster vaccination, pigs exhibited high IgG antibodies against CP, LPS, and HP. The anti-CP and anti-LPS IgG antibodies were found to function as opsonins in the phagocytosis of A. pleuropneumoniae by polymorphonuclear leukocytes, whereas antibodies to

the HP neutralized the cytotoxic effect of the HP on polymorphonuclear leukocytes. No killing of A. pleuropneumoniae was observed when the effects of the antibodies were tested in the presence of complement. Thus, polysaccharide-protein A. pleuropneumoniae conjugates elicit antibody responses against each component of each conjugate, which could be instrumental in protecting swine against SPAP.

AN 1993:20552 HCAPLUS <<LOGINID::20081107>>
DN 118:20552
OREF 118:3849a,3852a
TI Preparation, characterization, and immunogenicity of conjugate vaccines directed against Actinobacillus pleuropneumoniae virulence determinants
AU Byrd, Wyatt; Kadis, Solomon
CS Coll. Vet. Med., Univ. Georgia, Athens, GA, 30602, USA
SO Infection and Immunity (1992), 60(8), 3042-51
CODEN: INFIBR; ISSN: 0019-9567
DT Journal
LA English

L28 ANSWER 42 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Immunogenicity of S. sonnei polysaccharide-protein conjugate
AB Polysaccharide (PS) derived from Shigella sonnei lipopolysaccharide was covalently coupled with bovine serum albumin (BSA) by using adipic acid dihydrazide as a spacer mol. in the presence of carbodiimide. Antigenic determinants of both PS and BSA were retained after conjugation as tested in a sandwich ELISA. Immunization of rabbits revealed that PS was nonimmunogenic, while the conjugate induced high levels of antibodies reacting with S. sonnei LPS and whole bacterial cell. A clear booster effect could be induced by the conjugate. Anal. of antiserum demonstrated the specificity of antibody was mainly to O-PS determinants. Anticonjugate serum of rabbit could afford protection against S. sonnei challenge when passively transfered to mice.
AN 1993:5185 HCAPLUS <<LOGINID::20081107>>
DN 118:5185
OREF 118:1119a,1122a
TI Immunogenicity of S. sonnei polysaccharide-protein conjugate
AU Xu, Xiaoping; Chen, Zhihua; Su, Xin
CS Inst. Microbiol. Epidemiol., Acad. Mil. Med. Sci., Beijing, Peop. Rep. China
SO Zhonghua Weishengwuxue He Mianyixue Zazhi (1992), 12(3), 141-4
CODEN: ZWMZDP; ISSN: 0254-5101
DT Journal
LA Chinese

L28 ANSWER 46 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Pneumococcal conjugate vaccines
AB Conjugates of pneumococcal type 4 polysaccharides (PS4) or oligosaccharides to tetanus toxoid were prepared using the carbodiimide method. The use of a spacer, 6-aminohexanoic acid, resulted in higher incorporation of carrier protein. Conjugates contained up to 10% free polysaccharide, but no free protein. In general, polysaccharide conjugates induced higher anti-PS4 IgG antibody titers than oligosaccharide conjugates. Conjugates with the highest amount of incorporated protein were the most immunogenic. The response to conjugated PS4 does show characteristics of a T cell-dependent antibody response, in terms of both isotype distribution

and induction of immunol. memory. Repeated immunization with high doses of PS4TT conjugate resulted in a virtually neg. anti-PS4 IgG response, suggestive of the induction of high dose tolerance.
AN 1992:56856 HCAPLUS <<LOGINID::20081107>>
DN 116:56856
OREF 116:9807a,9810a
TI Pneumococcal conjugate vaccines
AU Peeters, Carla C. A. M.; Tenbergen-Meekes, Anne Marie; Haagmans, Bart; Evenberg, Dolf; Poolman, Jan T.; Zegers, Ben J. M.; Rijkers, Ger T.
CS Dep. Immunol., Univ. Hosp. Child. Youth, Utrecht, Neth.
SO Immunology Letters (1991), 30(2), 267-74
CODEN: IMLED6; ISSN: 0165-2478
DT Journal
LA English

L28 ANSWER 50 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis and characterization of Escherichia coli O18 O-polysaccharide conjugate vaccines
AB Nontoxic, serol. reactive O polysaccharide was derived from E. coli O18 lipopolysaccharide by acid hydrolysis, extraction with organic solvents,
and gel filtration chromatog. Oxidized O polysaccharide was covalently coupled to either Pseudomonas aeruginosa toxin A or cholera toxin by using adipic acid dihydrazide as a spacer mol. in the presence of carbodiimide. The resulting conjugates were composed of approx. equal amts. of O polysaccharide and protein and were nontoxic and nonpyrogenic. Both conjugates engendered an IgG antibody response in rabbits that recognized native O18 lipopolysaccharide. Such antibody was able to promote the uptake and killing of an E. coli O18 strain bearing the K1 capsule by human polymorphonuclear leukocytes. IgG isolated from the sera of rabbits immunized with either conjugate afforded protection against an E. coli O18 challenge when passively transferred to mice.
AN 1990:132057 HCAPLUS <<LOGINID::20081107>>
DN 112:132057
OREF 112:22137a,22140a
TI Synthesis and characterization of Escherichia coli O18 O-polysaccharide conjugate vaccines
AU Cryz, S. J., Jr.; Cross, A. S.; Sadoff, J. C.; Fuerer, E.
CS Swiss Serum and Vaccine Inst., Bern, CH-3001, Switz.
SO Infection and Immunity (1990), 58(2), 373-7
CODEN: INFIBR; ISSN: 0019-9567
DT Journal
LA English

L28 ANSWER 51 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Modulation of the immune response to pneumococcal type 14 capsular polysaccharide-protein conjugates by the adjuvant Quil A depends on the properties of the conjugates
AB Streptococcus pneumoniae type 14 capsular polysaccharide-bovine serum albumin (S14PS-BSA) conjugates were prepared by water-soluble-carbodiimide-mediated condensation with or without the use of N-hydroxysulfosuccinimide. The immunogenicities of the capsular polysaccharide (S14PS) and of the conjugates were studied in (CBA/N + BALB/c)F1 mice and in female BALB/c mice. The response in these mice indicates that S14PS could be classified as a thymus-independent type 2 antigen. Coupling of S14PS to BSA improved the immunogenicity of this polysaccharide, and an IgG memory response was evoked. Conjugation with N-hydroxysulfosuccinimide resulted in a product with a higher polysaccharide/protein ratio. This conjugate induced a greater immune

response than did the classical conjugate. Quil A enhanced the immune response to S14PS and to most S14PS-BSA conjugates. The enhancement of the immune response to the conjugates seemed to depend on the coupling procedure. Thus, for the construction of immunostimulating complexes based on polysaccharide or oligosaccharide-protein conjugates, attention should be paid to the degree of crosslinking of the antigens involved.
AN 1989:190638 HCAPLUS <<LOGINID::20081107>>
DN 110:190638
OREF 110:31611a,31614a
TI Modulation of the immune response to pneumococcal type 14 capsular polysaccharide-protein conjugates by the adjuvant Quil A depends on the properties of the conjugates
AU Verheul, A. F. M.; Versteeg, A. A.; De Reuver, M. J.; Jansze, M.; Snippe, H.
CS Dep. Immunol., Utrecht Univ., Utrecht, 3511 GG, Neth.
SO Infection and Immunity (1989), 57(4), 1078-83
CODEN: INFIBR; ISSN: 0019-9567
DT Journal
LA English

L28 ANSWER 54 OF 62 HCAPLUS COPYRIGHT 2008 ACS on STN
TI O-Polysaccharide-protein conjugates induce high levels of specific antibodies to Pseudomonas aeruginosa immunotype 3 lipopolysaccharide
AB A semi-synthetic vaccine against P. aeruginosa immunotype 3 was prepared by the coupling of P. aeruginosa immunotype 3 O-polysaccharide to tetanus toxoid. The O-polysaccharide was obtained by acid hydrolysis of immunotype 3 lipopolysaccharide, and purified by gel permeation chromatog. Analyses revealed a high grade of purity and at least a 1000-fold reduction of endotoxic activity compared to homologous lipopolysaccharide. It was conjugated to tetanus toxoid by mkeans of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide as coupling reagent. Antigenic determinants of both O-polysaccharide and tetanus toxoid were retained after conjugation. Immunization of mice revealed that O-polysaccharide was nonimmunogenic in mice. The O-specific part of the conjugate induced high levels of IgG antibodies reacting with immunotype 3 lipopolysaccharide in an enzyme-linked immunosorbent assay. By immunoblotting it was shown that the Se antibodies were directed to high mol. weight lipopolysaccharide only, demonstrating specificity for its O-polysaccharide moiety.
AN 1987:412729 HCAPLUS <<LOGINID::20081107>>
DN 107:12729
OREF 107:2103a,2106a
TI O-Polysaccharide-protein conjugates induce high levels of specific antibodies to Pseudomonas aeruginosa immunotype 3 lipopolysaccharide
AU Van de Wiel, Paul; Witvliet, Maarten H.; Evenberg, Dolf; Derks, Henk J. G. M.; Beuvery, E. Coen
CS Lab. Bact. Vaccines, Natl. Inst. Public Health Environ. Hyg., Bilthoven, 3720 BA, Neth.
SO Vaccine (1987), 5(1), 33-8
CODEN: VACCDE; ISSN: 0264-410X
DT Journal
LA

=> file hcaplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	329.36

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE 0.00 -24.00

FILE 'HCAPLUS' ENTERED AT 15:51:49 ON 07 NOV 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 7 Nov 2008 VOL 149 ISS 20
FILE LAST UPDATED: 6 Nov 2008 (20081106/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> file registry
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 2.69 332.05

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE 0.00 -24.00

FILE 'REGISTRY' ENTERED AT 15:51:53 ON 07 NOV 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 NOV 2008 HIGHEST RN 1071288-19-1
DICTIONARY FILE UPDATES: 6 NOV 2008 HIGHEST RN 1071288-19-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

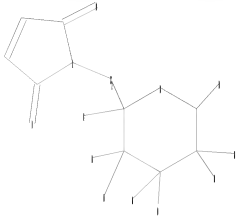
Please note that search-term pricing does apply when conducting SmartSELECT searches.

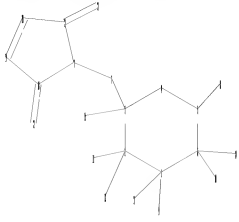
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of

experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\STNEXP\Queries\10568111maleimide.str





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ring nodes :
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ring bonds :
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exact bonds :
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G1

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:Atom 18:Atom 19:Atom
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22:CLASS 23:CLASS

L29 STRUCTURE UPLOADED

=> s l29
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100.0% PROCESSED 5 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

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L30            0 SEA SSS SAM L29

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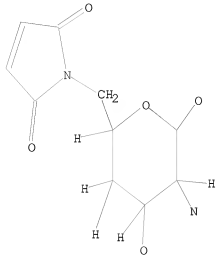

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G1


Structure attributes must be viewed using STN Express query preparation.


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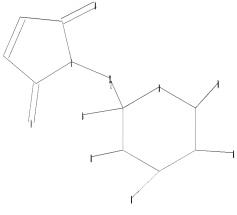

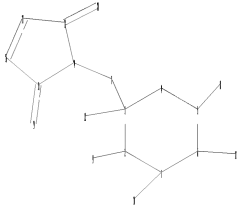

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ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  14-15  14-18  15-16  16-17  17-18
exact/norm bonds :
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exact bonds :
1-10 2-9 3-7 3-12 6-11 7-14

G1

Match level :
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11:CLASS 12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS

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SEARCH TIME: 00.00.01

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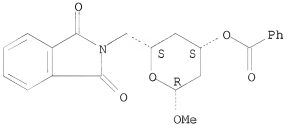
PROJECTED ANSWERS: 5 TO   234

L32   5 SEA SSS SAM L31

=> d l32 scan

L32 5 ANSWERS   REGISTRY COPYRIGHT 2008 ACS on STN
IN   β-D-threo-Hexopyranoside, methyl
     2,4,6-trideoxy-6-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3-benzoate
     (9CI)
MF   C22 H21 N O6

Absolute stereochemistry.



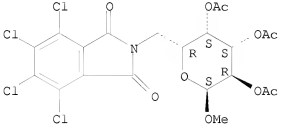
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L32 5 ANSWERS   REGISTRY COPYRIGHT 2008 ACS on STN

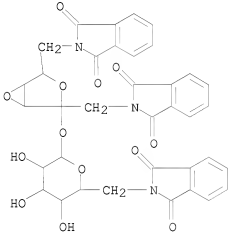
IN α-D-Galactopyranoside, methyl
    6-deoxy-6-(4,5,6,7-tetrachloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-,
    2,3,4-triacetate
MF C21 H19 Cl4 N O10

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L32 5 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN α-D-Glucopyranoside, 3,4-anhydro-1,6-dideoxy-1,6-bis(1,3-dihydro-1,3-
    dioxo-2H-isoindol-2-yl)-β-D-tagatofuranosyl
    6-deoxy-6-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)- (9CI)
MF C36 H29 N3 O13



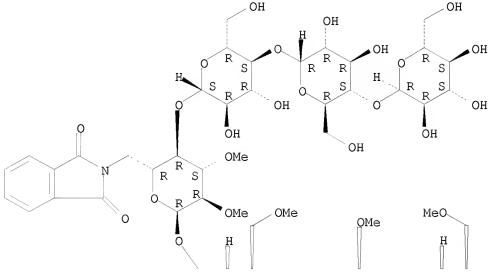
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L32 5 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN α-D-Glucopyranoside, methyl [O-α-D-glucopyranosyl-
    (1→4)]2-O-β-D-glucopyranosyl-(1→4)-O-6-deoxy-6-(1,3-
    dihydro-1,3-dioxo-2H-isoindol-2-yl)-2,3-di-O-methyl-α-D-

glucopyranosyl-(1→4)-[O-2,3,6-tri-O-methyl-β-D-glucopyranosyl-(1→4)-O-2,3,6-tri-O-methyl-α-D-glucopyranosyl-(1→4)]3-O-2,3,6-tri-O-methyl-β-D-glucopyranosyl-(1→4)-O-2,3-di-O-methyl-α-D-glucopyranosyl-(1→4)-O-2,3-di-O-methyl-β-D-glucopyranuronosyl-(1→4)-O-α-D-glucopyranosyl-(1→4)-O-2,3-di-O-methyl-α-L-idopyranuronosyl-(1→4)- (9CI)

MF C134 H221 N O84

Absolute stereochemistry.

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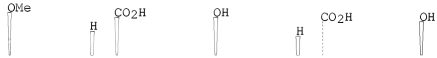
H
OMe
MeO
H
MeO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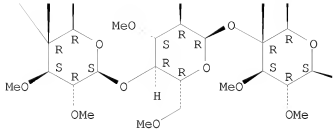
CO2H
OH
H
CO2H
OH

PAGE 2-A



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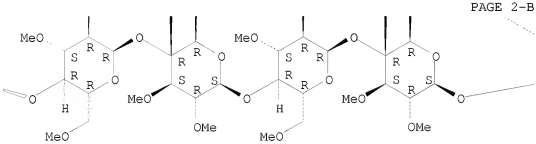
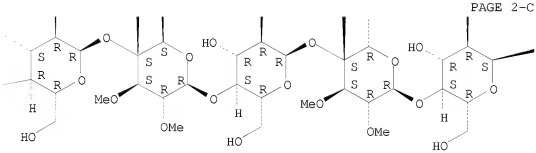


PAGE 2-C

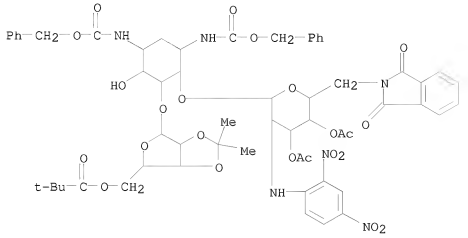


PAGE 2-D

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L32 5 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN D-Streptamine, O-3,4-di-O-acetyl-2,6-dideoxy-6-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2-[(2,4-dinitrophenyl)amino]-β-D-glucopyranosyl-(1→6)-O-[5-O-(2,2-dimethyl-1-oxopropyl)-2,3-O-(1-methylethylidene)-

β-D-ribofuranosyl-(1→5)]-2-deoxy-N,N'-
bis[(phenylmethoxy)carbonyl]- (9CI)
MF C59 H66 N6 O23



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s l31 sss full
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FULL SCREEN SEARCH COMPLETED - 322 TO ITERATE

100.0% PROCESSED 322 ITERATIONS 79 ANSWERS
SEARCH TIME: 00.00.01

L33 79 SEA SSS FUL L31

=> file hcaplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 179.28 511.33

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE 0.00 -24.00

FILE 'HCAPLUS' ENTERED AT 15:53:37 ON 07 NOV 2008
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FILE COVERS 1907 - 7 Nov 2008 VOL 149 ISS 20
FILE LAST UPDATED: 6 Nov 2008 (20081106/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l33
L34 38 L33

=> s cojugat?
L35 38 COJUGAT?

=> s conjugat?
L36 258682 CONJUGAT?

=> s l34 and l36
L37 1 L34 AND L36

=> d l37 ti abs bib

L37 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Enzymatic PEGylation of therapeutic proteins
AB A method of conjugating peptides and proteins by means of
glycosyltransferase is provided.
AN 2006:317434 HCAPLUS <<LOGINID::20081107>>
DN 144:368444
TI Enzymatic PEGylation of therapeutic proteins
IN Behrens, Carsten; Garibay, Patrick William; Zundel, Magali
PA Novo Nordisk A/S, Den.
SO PCT Int. Appl., 165 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006035057	A1	20060406	WO 2005-EP54901	20050929
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

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     US 20080108557      A1    20080508    US 2007-664199          20070919
PRAI DK 2004-1479        A     20040929
     DK 2005-90          A     20050118
     DK 2005-175         A     20050204
     WO 2005-EP54901     W     20050929
OS   MARPAT 144:368444
RE.CNT  6     THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> s polysaccharide or polysial?
         67865 POLYSACCHARIDE
          1490 POLYSIAL?
L38       69242 POLYSACCHARIDE OR POLYSIAL?
 75% OF LIMIT FOR TOTAL ANSWERS REACHED

=> s polysacch?
L39      107812 POLYSACCH?

=> s l34 and l39
L40           1 L34 AND L39

=> d l40 ti abs bib

L40  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation of polysaccharides with antithrombotic activity
     comprising at least a covalent bond with biotin or a biotin derivative
GI
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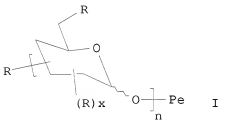

I

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AB   The invention concerns novel synthetic polysaccharides I wherein
     Pe is a pentasaccharide; x is 0, 1; n = 0-25; R is amide-biotin, alkoxy,
     OSO3H, with antithrombotic activity, having at least a covalent bond with
     biotin or a biotin derivative and a method using avidin or streptavidin for
     neutralizing said polysaccharides.  Thus, Me
     (2-[6-(6-biotin-amidohexamido)hexamido]-2-desoxy-3,4-di-O-methyl-6-O-
     sulfonato-α-D-glucopyranosyl)-(1→4)-(2,3-di-O-methyl-β-D-
     glucopyranosyluronic acid)-(1→4)-(2,3,6-tri-O-sulfonato-α-D-
     glucopyranosyl)-(1→4)-(2,3-di-O-methyl-α-L-idopyranosyluronic
     acid)-(1→4)-2,3,6-tri-O-sulfonato-α-D-glucopyranoside, sodium
     salt was prepared for potential use as antithrombotics (no data).
AN   2002:240830  HCAPLUS <<LOGINID::20081107>>
DN   136:263383
TI   Preparation of polysaccharides with antithrombotic activity
     comprising at least a covalent bond with biotin or a biotin derivative
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IN   Duchaussoy, Philippe; Herbert, Jean-Marc; Petitou, Maurice; Savi, Pierre
PA   Sanofi-Synthelabo, Fr.; Akzo Nobel N.V.
SO   PCT Int. Appl., 70 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
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     NO 2003001295        A      20030522    NO 2003-1295           20030320
     BG 107650            A      20031128    BG 2003-107650         20030320
     MX 2003PA02483       A      20040524    MX 2003-PA2483         20030320
     HR 2003000219        A1     20030630    HR 2003-219            20030321
     US 20040024197       A1     20040205    US 2003-381154         20030321
     US 6844329           B2     20050118
     HK 1053316           A1     20080307    HK 2003-105615         20030805
     US 20060160768       A1     20060720    US 2005-35717          20050114
     KR 2008049139        A      20080603    KR 2008-709747         20080423
PRAI FR 2000-12094        A      20000922
     WO 2001-FR2918       W      20010920
     KR 2003-704108       A3     20030321
OS   MARPAT 136:263383
RE.CNT  1     THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s thioseter
L41           0 THIOSETER

=> s thioester
L42        4242 THIOESTER
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=> s polysial?
L43       1490 POLYSIAL?

=> s 142 and 143
L44          1 L42 AND L43

=> d 144 ti abs bib

L44  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Diagnosis and prevention of hyperinsulinemia and type II diabetes using
     patterns of gene expression in muscle cells
AB   Mouse genes differentially expressed in comparisons of normal vs.
     hyperinsulinemic, hyperinsulinemic vs. type 2 diabetic, and normal vs.
     type 2 diabetic muscle by gene chip anal. have been identified, as have
     corresponding human genes and proteins.  The human mols., or antagonists
     thereof, may be used for protection against hyperinsulinemia or type 2
     diabetes, or their sequelae.
AN   2005:984043  HCAPLUS <<LOGINID::20081107>>
DN   143:284109
TI   Diagnosis and prevention of hyperinsulinemia and type II diabetes using
     patterns of gene expression in muscle cells
IN   Kopchick, John J.; Coschigano, Karen T.; Boyce, Keith S.; Kriete, Andres
PA   Ohio University, USA; Icoria, Inc.
SO   PCT Int. Appl., 300 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 2005082398       A2     20050909    WO 2005-US5596         20050224
     WO 2005082398       A3     20060126
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
             SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     AU 2005216922       A1     20050909    AU 2005-216922         20050224
     CA 2557181          A1     20050909    CA 2005-2557181        20050224
     EP 1732582          A2     20061220    EP 2005-713932         20050224
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
PRAI US 2004-547512P     P      20040226
     US 2004-579342P     P      20040615
     WO 2005-US5596      W      20050224


=> s polysaccharide
L45       67865 POLYSACCHARIDE

=> s 142 and 145
L46          10 L42 AND L45

=> s 146 and (PY<2004 or AY<2004 or PRY<2004)
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      24009920 PY<2004
       4789233 AY<2004
       4260426 PRY<2004
L47           7 L46 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> d 147 1-7 ti abs bib

L47  ANSWER 1 OF 7  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   The complete sequence of the 1,683-Kb pSymB megaplasmid from the N2-fixing
     endosymbiont Sinorhizobium meliloti
AB   Anal. of the 1683,333-nt sequence of the pSymB megaplasmid from the
     symbiotic N2-fixing bacterium Sinorhizobium meliloti revealed that the
     replicon has a high gene d. with a total of 1570 protein-coding regions,
     with few insertion elements and regions duplicated elsewhere in the
     genome.  The only copies of an essential arg-tRNA gene and the minCDE
     genes are located on pSymB.  Almost 20% of the pSymB sequence carries
     genes encoding solute uptake systems, most of which were of the
     ATP-binding cassette family.  Many previously unsuspected genes involved
     in polysaccharide biosynthesis were identified and these,
     together with the two known distinct exopolysaccharide synthesis gene
     clusters, show that 14% of the pSymB sequence is dedicated to
     polysaccharide synthesis.  Other recognizable gene clusters
     include many involved in catabolic activities such as protocatechuate
     utilization and phosphonate degradation  The functions of these genes are
     consistent with the notion that pSymB plays a major role in the
     saprophytic competence of the bacteria in the soil environment.
AN   2001:634533  HCAPLUS <<LOGINID::20081107>>
DN   136:242629
TI   The complete sequence of the 1,683-Kb pSymB megaplasmid from the N2-fixing
     endosymbiont Sinorhizobium meliloti
AU   Finan, Turlough M.; Weidner, Stefan; Wong, Kim; Buhrmester, Jens; Chain,
     Patrick; Vorholter, Frank J.; Hernandez-Lucas, Ismael; Becker, Anke;
     Cowie, Alison; Gouzy, Jerome; Golding, Brian; Puhler, Alfred
CS   Department of Biology, McMaster University, Hamilton, ON, L8S 4K1, Can.
SO   Proceedings of the National Academy of Sciences of the United States of
     America (2001), 98(17), 9889-9894
     CODEN: PNASA6; ISSN: 0027-8424
PB   National Academy of Sciences
DT   Journal
LA   English
RE.CNT  76    THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47  ANSWER 2 OF 7  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Highly reactive esters of carboxy polysaccharides and their preparation
AB   The reactive esters are prepared by converting partially or totally the
     carboxy groups of carboxy polysaccharides with a (substituted) aromatic alc.,
     a (substituted) aromatic heterocyclic alc., an N-hydroxylamine or their mixture
     These active esters can be further modified to other derivs. such as
     esters, thioesters or amides.  Such active esters and derivs. can be used
     in the biomedical and pharmaceutical fields to prepare, for example,
     cosmetic articles, health care articles, surgical articles, and diagnostic
     kits.  An example of the esters was pentafluorophenyl hyaluronate
     tetrabutylammonium salt.
AN   1995:985973  HCAPLUS <<LOGINID::20081107>>
DN   124:11297
OREF 124:2291a,2294a
TI   Highly reactive esters of carboxy polysaccharides and their preparation
IN   Righetto, Zefferino; Bellini, Davide
PA   Fidia Advanced Biopolymers S.r.l., Italy
SO   PCT Int. Appl., 42 pp.
```

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9524429	A1	19950914	WO 1995-EP932	19950313 <--
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	IT 1268955	B1	19970318	IT 1994-PD43	19940311 <--
	CA 2184899	A1	19950814	CA 1995-2184899	19950313 <--
	CA 2184899	C	20060530		
	EP 749446	A1	19961227	EP 1995-913099	19950313 <--
	EP 749446	B1	19991124		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	AT 186916	T	19991215	AT 1995-913099	19950313 <--
	ES 2141925	T3	20000401	ES 1995-913099	19950313 <--
	PT 749446	T	20000531	PT 1995-913099	19950313 <--
	US 5856299	A	19990105	US 1996-702673	19961126 <--
	GR 3032589	T3	20000531	GR 2000-400284	20000204 <--
PRAI	IT 1994-PD43	A	19940311	<--	
	WO 1995-EP932	W	19950313	<--	

L47 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Specificity of the thioester-containing reactive site of human C3 and its significance to complement activation
AB The specificity of the thioester-containing site in three plasma proteins is regulated by elements of their protein structures other than the thioester bond itself. Human C4A and α2-macroglobulin preferentially form amide linkages while human C3 primarily forms ester linkages with hydroxyl groups. The authors have examined the thioester in C3 and found evidence of strong preferences for certain carbohydrates, indications of selectivity for specific positions on those carbohydrates and a preference for terminal sugars in polysaccharides. A testable set of rules are derived from these findings which predict preferred attachment sites on polysaccharides. A computer model of the effect of different reactivities on activation of the alternative pathway of complement suggested that organisms might greatly alter their susceptibility to complement with small changes in carbohydrate structure. While a random selection of 20 biol. particles showed no correlation between activation and C3b attachment efficiency, subsets of related organisms differing primarily in their surface polysaccharide exhibited stronger correlations. The strongest correlation occurred in a series of the yeasts (Cryptococcus neoformans) possessing capsular polysaccharides with one, two, three or four branching xylose sugars per repeating unit. These organisms exhibited capture efficiencies for metastable C3b from 12% (one-xylose strain) to 41% (four-xylose strain).
AN 1994:555261 HCAPLUS <<LOGINID::20081107>>
DN 121:155261
OREF 121:28081a,28084a
TI Specificity of the thioester-containing reactive site of human C3 and its significance to complement activation
AU Sahu, Arvind; Kozel, Thomas R.; Pangburn, Michael K.
CS Health Science Center, University of Texas, Tyler, TX, 75710, USA
SO Biochemical Journal (1994), 302(2), 429-36
CODEN: BIJOAK; ISSN: 0264-6021
DT Journal
LA English

L47 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Biosynthesis of ferulic acid esters of plant cell wall polysaccharides in endomembranes from parsley cells
AB A microsomal preparation from suspension-cultured parsley cells is able to transfer ferulic acid from the resp. CoA thioester to endogenous acceptors. The reaction is not enhanced by digitonin but stimulated by Mg2+, Ca2+, and Co2+. Spermine can partly replace divalent ions. Solubility properties and degradation by polysaccharide hydrolases suggest that the products are polymeric cell wall carbohydrates. Sucrose d. gradient centrifugation revealed that the most active vesicle fraction is distinct from plasma membranes but does also not peak with inosine 5'-diphosphatase. It is suggested that a subfraction of the Golgi-apparatus is the source of enzyme and acceptors.
AN 1992:17272 HCAPLUS <<LOGINID::20081107>>
DN 116:17272
OREF 116:2993a,2996a
TI Biosynthesis of ferulic acid esters of plant cell wall polysaccharides in endomembranes from parsley cells
AU Meyer, Knut; Kohler, Annegret; Kauss, Heinrich
CS FB Biol., Univ. Kaiserslautern, Kaiserslautern, D-6750, Germany
SO FEBS Letters (1991), 290(1-2), 209-12
CODEN: FEBLAL; ISSN: 0014-5793
DT Journal
LA English

L47 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Analysis of recognition in the alternative pathway of complement. Effect of polysaccharide size
AB Covalent attachment of the complement (C) protein C3b to polysaccharides on biol. particles which activate the alternative pathway leads to changes in the affinity of C3b for factor H, a regulatory protein of the C system. In this study the size of the site with which the polysaccharides interact and its spacial relationship to the thioester site were investigated using a fluorimetric assay and soluble C3b attached to low mol. weight polysaccharides. Oligomers of α1-6 and α1-4 polyglucose and β1-2 polyfructose were prepared and attached to C3b at the thioester site. C3b bound to monomeric, dimeric, or trimeric sugars exhibited the same interaction with factor H as free C3b, i.e., there was no effect due to attachment alone. Beginning with tetrameric oligosaccharides a linear decrease in factor H binding was observed with increasing oligosaccharide size and the effect reached an apparent maximum with large polysaccharides. Maximum inhibition of factor H function was estimated to occur at a length of 16 saccharide units. Apparently, this site, which regulates the inactivation rate of surface-bound C3b and thus the activation of the alternative pathway of C, spans a maximum of 13 sugar units (<65 Å) starting 4 units (.apprx.15 Å) from the thioester site in C3b.
AN 1989:210575 HCAPLUS <<LOGINID::20081107>>
DN 110:210575
OREF 110:34927a,34930a
TI Analysis of recognition in the alternative pathway of complement. Effect of polysaccharide size
AU Pangburn, Michael K.
CS Health Cent., Univ. Texas, Tyler, TX, 75710, USA
SO Journal of Immunology (1989), 142(8), 2766-70
CODEN: JOIMA3; ISSN: 0022-1767
DT Journal
LA English

L47 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Analysis of the mechanism of recognition in the complement alternative pathway using C3b-bound low molecular weight polysaccharides

AB The human complement (C) system recognizes bacterial, fungal, and viral activators of the alternative pathway following covalent attachment of the protein C3b to carbohydrates (CHO) on the surface of the organisms. Recognition first manifests itself as a 3-10-fold reduction in the affinity of C3b for factor H, a regulatory protein of C. This report describes the use of a fluorometric assay which is sensitive to the C3b-H interaction to study the characteristics of recognition. Fluid phase C3b covalently bound to CHO (C3b-CHO) was prepared by activating C3 in the presence of the small homopolymers dextran or inulin. In particulate form both polysaccharides are activators of C. The conjugates exhibited increased resistance to inactivation in the factor H-dependent assays compared to C3b not bound to CHO and to C3b bound to mono- or disaccharides. C3b-CHO conjugates failed to bind to factor H-Sepharose. Apparently, the recognition site which induces a reduction in the affinity of C3b for factor H is distinct from the thioester site of C3b and can recognize structural features of polysaccharides including size, sialic acid content, and possibly aspects of 3-dimensional oligosaccharide structure.
AN 1989:210574 HCAPLUS <<LOGINID::20081107>>
DN 110:210574
OREF 110:34927a,34930a
TI Analysis of the mechanism of recognition in the complement alternative pathway using C3b-bound low molecular weight polysaccharides
AU Pangburn, Michael K.
CS Health Cent., Univ. Texas, Tyler, TX, 75710, USA
SO Journal of Immunology (1989), 142(8), 2759-65
CODEN: JOIMA3; ISSN: 0022-1767
DT Journal
LA English

L47 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Structure of a mycobacterial polysaccharide-fatty acyl-CoA complex: Nuclear magnetic resonance studies
AB MMP, a linear α1→4 linked polymer of 3-O-methylmannose, regulates the fatty acid synthetase from Mycobacterium smegmatis by forming stoichiometric complexes with the long-chain acyl-CoA synthetase products. In agreement with previous proposals, NMR studies show that the polysaccharide, a random coil in its free form, undergoes a major conformational transition on enclosing long-chain acyl-CoA. The polysaccharide, probably in helical conformation in the complexed form, interacts with both the paraffinic chain and the CoA moieties of the included fatty acyl thioester.
AN 1980:490570 HCAPLUS <<LOGINID::20081107>>
DN 93:90570
OREF 93:14439a,14442a
TI Structure of a mycobacterial polysaccharide-fatty acyl-CoA complex: Nuclear magnetic resonance studies
AU Maggio, John E.
CS Dep. Chem., Harvard Univ., Cambridge, MA, 02138, USA
SO Proceedings of the National Academy of Sciences of the United States of America (1980), 77(5), 2582-6
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English

* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 16:06:10 ON 07 NOV 2008
FILE 'HCAPLUS' ENTERED AT 16:06:10 ON 07 NOV 2008

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION

FULL ESTIMATED COST 45.24 556.57

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION

CA SUBSCRIBER PRICE -8.00 -32.00

=> s l22 adn l36 and l42
MISSING OPERATOR L22 ADN
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l22 and l36 and l42
L48 184 L22 AND L36 AND L42

=> s (saccharide or polysaccharide)
10998 SACCHARIDE
67865 POLYSACCHARIDE
L49 77759 (SACCHARIDE OR POLYSACCHARIDE)

=> s l48 and l49
L50 5 L48 AND L49

=> d l50 1-5 ti

L50 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Methods for the preparation of functionalized peptides, proteins and carbohydrates and their conjugates

L50 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Structure and reactivity of LpxD, the N-acyltransferase of lipid A biosynthesis

L50 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Reversible modification of amine-containing compounds by disubstituted maleic anhydride derivatives

L50 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Method for conjugating nucleotides and nucleosides to disulfide-, maleimide-, and thiol-containing compounds

L50 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Analysis of the mechanism of recognition in the complement alternative pathway using C3b-bound low molecular weight polysaccharides

=> d l50 1-5 ti abs bib

L50 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Methods for the preparation of functionalized peptides, proteins and carbohydrates and their conjugates
AB The invention relates to methods for ligation or derivatization of peptides, amino acids, and carbohydrates using a chalcogen-based reactant, a peptide or amino acid reactant, a chalcogen-containing peptide or amino acid reactant, or a combination of two or more of the these reactants. The invention focuses on three main reaction types: the formation of permanent linkages to cysteine, the development of a new and improved methodol. for the formation N-glycosylated asparagine derivs., and a novel extension of the concept of native chemical ligation to the formation of peptide bonds to phenylalanine, tyrosine, tryptophan, aspartic acid and asparagine. The claims describe ligation or derivatization which comprises reacting an amino acid or peptide derivative HSCO(CH2)1-2CH(NH-Pep1)CO-X1-R1 [X1 is O or

NH; R1 is alkyl, alkenyl, aryl, alkylaryl, arylalkyl, an optionally-protected amino acid or peptide; Pep1 is a (protected) amino acid or peptide] with a sulfonamide RNHSO2-A1 [R is a (protected) amino acid, peptide, monosaccharide, or polysaccharide; A1 is an electron-deficient alkyl, aryl, or heteroaryl group] to form ligated product RNHCO(CH2)1-2CH(NH-Pep1)CO-X1-R1. Thus, a pentapeptide containing the 1-ethyldithio phenylalaninyl group (XRANK) and a pentapeptide thioester (LYRAM-SBn) were combined by the native chemical ligation method of the invention using 4-mercaptobenzeneacetic acid in 0.1 M Tris Buffer of pH 7.5 to afford decapeptide LYRAMXRANK. The two peptide reactant were selected to illustrate the broad functional group compatibility of the chemical

AN 2008:674421 HCAPLUS <<LOGINID::20081107>>

DN 149:32567

TI Methods for the preparation of functionalized peptides, proteins and carbohydrates and their conjugates

IN Crich, David; Guo, Songpo; Yang, Fan; Sana, Kasinath

PA The Board of Trustees of the University of Illinois, USA

SO PCT Int. Appl., 70pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008066816	A2	20080605	WO 2007-US24456	20071128
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI US 2006-861380P	P	20061128		

OS MARPAT 149:32567

L50 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Structure and reactivity of LpxD, the N-acyltransferase of lipid A biosynthesis

AB The external layer of the Gram-neg. bacterial outer membrane is primarily composed of a protective, selectively permeable lipopolysaccharide (LPS), which consists of 3 components: lipid A, O-antigen, and a core polysaccharide. The biosynthesis of lipid A by Chlamydia trachomatis relies on UDP-3-O-acylglucosamine N-acyltransferase (LpxD), which transfers 3-hydroxyarachidic acid from acyl carrier protein (ACS) to the 2'-amine of UDP-3-O-myristoylglucosamine. Here, the crystal structures of LpxD and its complexes with 25 mM (complex I) and 100 mM (complex II) UDP-N-acetylglucosamine (UDP-GlcNAc) are reported. The crystallog. study revealed that LpxD was a homotrimer, each subunit of which was constructed from a novel combination of an N-terminal uridine-binding domain, a core lipid-binding domain, and a C-terminal helical extension. Highly conserved residues dominate nucleotide binding. Phe-43 and Tyr-49 formed π-stacking interactions with uracil, and Asn-46 and His-284 formed H-bonds with the phosphate groups. These interactions placed the glucosamine moiety at the catalytic center formed by 2 adjacent subunits. His-247 and His-284 contributed to a mechanism

involving nucleophilic attack by the amine of one substrate on the carbonyl C atom of an ACP thioester conjugate. Serendipitously, the study revealed a fatty acid (FA) binding groove near the catalytic center. Mass spectrometry elucidated the presence of a FA mixture binding to LpxD, with palmitic acid the most prevalent. The placement of UDP-N-acetylglucosamine and the FA provided details of N-acyltransferase ligand interactions and allowed for a description of structure and reactivity at an early stage of LPS assembly.

AN 2007:360649 HCAPLUS <<LOGINID::20081107>>
DN 146:311450
TI Structure and reactivity of LpxD, the N-acyltransferase of lipid A biosynthesis
AU Buetow, Lori; Smith, Terry K.; Dawson, Alice; Fyffe, Stewart; Hunter, William N.
CS Div. Biol. Chem., Mol. Microbiol., Sch. Life Sci., Univ. Dundee, Dundee, DD1 5EH, UK
SO Proceedings of the National Academy of Sciences of the United States of America (2007), 104(11), 4321-4326
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Reversible modification of amine-containing compounds by disubstituted maleic anhydride derivatives
AB A process for the reversible modification of an amine-containing compound is described. Modification of the compound can be used to facilitate delivery of mols. to cells in vitro and in vivo or to alter interactions or activities of the compds. A process for reversibly amine-containing compound comprises covalently attaching a disubstituted maleic anhydride containing a targeting signal that binds to a cell, e.g., a peptide, saccharide , galactose, or vitamin, to an amine on the compound The amine-containing compound consists of a polycation polymer, such as a cationic polyamine. The described modifiers can also be utilized as crosslinkers. For example, reversible modification of anticancer drug doxorubicin was carried out. To a 1 mM solution of doxorubicin (Dox) in 50 mM HEPES buffer pH 7.9 was added 3 equiv 2-propionic-3-methylmaleic anhydride (CDM) adduct (such as CDM or a CDM-polymer conjugate, i.e. PEG-CDM). The modified DOX was then added to cells in tissue culture or injected in vivo.

AN 2006:545210 HCAPLUS <<LOGINID::20081107>>
DN 145:50999
TI Reversible modification of amine-containing compounds by disubstituted maleic anhydride derivatives
IN Rozema, David B.; Wakefield, Darren; Wolff, Jon A.; Ekena, Kirk; Hagstrom, James E.
PA USA
SO U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. Ser. No. 444,662.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 62

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060122096	A1	20060608	US 2005-312319	20051220
	US 7442764	B2	20081028		
	US 6630351	B1	20031007	US 2000-589978	20000607
	US 20030026841	A1	20030206	US 2002-95680	20020311

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     US 6919091          B2    20050719
     US 20030220264      A1    20031127    US 2003-444662         20030523
     US 20050250683      A9    20051110
     US 7019113          B2    20060328
     WO 2003100081       A2    20031204    WO 2003-US16360        20030523
     WO 2003100081       A3    20041021
         W:  JP
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IT, LU, MC, NL, PT, RO, SE, SI, SK, TR
     EP 1506218          A2    20050216    EP 2003-755460         20030523
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK
     JP 2005529931       T     20051006    JP 2004-507521         20030523
     US 20050123600      A1    20050609    US 2005-46590          20050128
     US 7098032          B2    20060829
PRAI US 1999-137859P     P     19990607
     US 1999-167836P     P     19991129
     US 1999-172809P     P     19991221
     US 2000-589978      A2    20000607
     US 2002-95680       A1    20020311
     US 2002-383298P     P     20020524
     US 2003-444662      A2    20030523
     US 2005-46590       A2    20050128
     US 1999-174132P     P     19991231
     US 2001-753990      A3    20010102
     WO 2003-US16360     W     20030523
RE.CNT  64    THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50  ANSWER 4 OF 5  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Method for conjugating nucleotides and nucleosides to
     disulfide-, maleimide-, and thiol-containing compounds
AB   Compds. comprised of an agent linked to a nucleotide, nucleoside,
     polynucleotide, or analog, thereof, are described.  The agent is linked
     through a sulfur atom bound to a phosphorus atom of a nucleotide,
     nucleoside, or polynucleotide.  For example, a phosphorotioate-containing
     ester of a nucleotide, nucleoside, polynucleotide, or an analog thereof,
     can be attached to a maleimide group on an agent through a cyclic
     thioester linkage.  Agents include proteins, glycoproteins,
     antibodies, antibody fragments, hormones, saccharides or drugs.  Antisense
     oligonucleotide can be linked to an antibody for targeting of the
     antisense oligonucleotide to a specific cell.  In addition, methods for
     producing the compds. are described.  In example, mixed disulfide was
     formed between phosphorothioate-dideoxyinosine or
     thymidyl-phosphorothioate-thymidine and Ellman's reagent, cyclic
     thioester was formed between N-(1-pyrenyl)maleimide and
     thiophosphoric acid or thymidyl-phosphorothioate-thymidine or
     2'-deoxycytosine-5'-O-(1-thiotriphosphate), and 5'-ADP beta-S was reacted
     with maleimide-modified albumin.
AN   1995:489993  HCAPLUS <<LOGINID::20081107>>
DN   122:237779
OREF 122:43450h,43451a
TI   Method for conjugating nucleotides and nucleosides to
     disulfide-, maleimide-, and thiol-containing compounds
IN   Weltman, Joel K.; Karim, Aftab S.
PA   USA
SO   PCT Int. Appl., 22 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
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     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 9502422           A1    19950126    WO 1994-US7610         19940712
        W:  CA, JP
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRAI US 1993-91156        A     19930712
OS   MARPAT 122:237779

L50  ANSWER 5 OF 5  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Analysis of the mechanism of recognition in the complement alternative
     pathway using C3b-bound low molecular weight polysaccharides
AB   The human complement (C) system recognizes bacterial, fungal, and viral
     activators of the alternative pathway following covalent attachment of the
     protein C3b to carbohydrates (CHO) on the surface of the
     organisms.  Recognition first manifests itself as a 3-10-fold reduction in the
     affinity of C3b for factor H, a regulatory protein of C.  This
     report describes the use of a fluorometric assay which is sensitive to the
     C3b-H interaction to study the characteristics of recognition.  Fluid
     phase C3b covalently bound to CHO (C3b-CHO) was prepared by activating C3 in
     the presence of the small homopolymers dextran or inulin.  In particulate
     form both polysaccharides are activators of C.  The conjugates
     exhibited increased resistance to inactivation in the factor H-dependent
     assays compared to C3b not bound to CHO and to C3b bound to mono- or
     disaccharides.  C3b-CHO conjugates failed to bind to factor
     H-Sepharose.  Apparently, the recognition site which induces a reduction in
     the affinity of C3b for factor H is distinct from the thioester
     site of C3b and can recognize structural features of polysaccharides
     including size, sialic acid content, and possibly aspects of 3-dimensional
     oligosaccharide structure.
AN   1989:210574  HCAPLUS <<LOGINID::20081107>>
DN   110:210574
OREF 110:34927a,34930a
TI   Analysis of the mechanism of recognition in the complement alternative
     pathway using C3b-bound low molecular weight polysaccharides
AU   Pangburn, Michael K.
CS   Health Cent., Univ. Texas, Tyler, TX, 75710, USA
SO   Journal of Immunology (1989), 142(8), 2759-65
     CODEN: JOIMA3; ISSN: 0022-1767
DT   Journal
LA   English


=> s linker
L51      26060 LINKER

=> s l48 and l51
L52         11 L48 AND L51

=> s l52 and (PY<2004 or AY<2004 or PRY<2004)
      24009920 PY<2004
       4789233 AY<2004
       4260426 PRY<2004
L53          7 L52 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> d l53 1-7 ti nas bib
'NAS' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
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APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):ti abs bib

L53  ANSWER 1 OF 7  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Inflammation-associated genes and proteins for assessing transplant
     recipient's risk of delayed graft function, graft rejection and long-term
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prognosis

AB The present invention features prognostic methods useful in assessing patients who have received a transplant. The invention also features reagents, optionally packaged as kits or organized as arrays, that can be used to carry out those prognostic methods. The inventions are based, in part, on our anal. of gene expression in renal allografts and clin. parameters, such as the age of the donor. The clin. parameters include one or more variables associated with the recipient (e.g., the recipient's age and/or race); one or more variables associated with the graft (e.g., whether the graft is obtained from a living donor or a cadaver and the ischemic time); and variables associated with the donor (e.g., the donor's age and/or race). The genes that can be assessed include those encoding agents that mediate inflammation, immune activation, and cell death or apoptosis (we may refer to these genes below as "inflammatory", "immune" or "cytoprotective"). Surprisingly, we found that the levels of gene expression could predict the occurrence of DGF, AR, and the quality of later graft function even when analyzed shortly after the transplant was performed (e.g., shortly after vascular anastomosis and tissue reperfusion). We also found that clin. parameters available at the time of transplantation correlate with decreased graft health and can be considered in combination with gene expression to evaluate a patient's risk for an adverse outcome.

AN 2004:718744 HCAPLUS <<LOGINID::20081107>>

DN 141:242025

TI Inflammation-associated genes and proteins for assessing transplant recipient's risk of delayed graft function, graft rejection and long-term prognosis

IN Strom, Terry B.; Libermann, Towia; Schachter, Asher

PA Beth Israel Deaconess Medical Center, Inc., USA

SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004074815	A2	20040902	WO 2004-US4839	20040217 <--
	WO 2004074815	A3	20050113		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004213839	A1	20040902	AU 2004-213839	20040217 <--
	CA 2516013	A1	20040902	CA 2004-2516013	20040217 <--
	EP 1599602	A2	20051130	EP 2004-711942	20040217 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 20070122806	A1	20070531	US 2005-545198	20050810 <--
PRAI	US 2003-447540P	P	20030214	<--	
	WO 2004-US4839	A	20040217		

L53 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Backbone anchored thioester and selenoester generators

AB Thioester and selenoester generators, precursors thereof, thioester and selenoester compds. produced therefrom, and related methods for their production are provided. The subject thioester and selenoester generators include an amino acid synthon having an

N-terminal group joined to a C-terminal group through an organic backbone comprising one or more carbons. The organic backbone contains a backbone nitrogen, anchored to a support through a nucleophile-stable linker that lacks reactive functional groups. The organic backbone may include a target mol. of interest, such as an amino acid, peptide, polypeptide or other organic compound of interest, and/or the N- and/or C-termini can be elaborated using a variety of synthesis approaches to provide a target mol. of interest. The compds. and methods find a wide variety of uses, including use in thioester- or selenoester-based chemical ligation techniques.

AN 2004:550795 HCAPLUS <<LOGINID::20081107>>
DN 141:106737
TI Backbone anchored thioester and selenoester generators
IN Miranda, Leslie Philip
PA USA
SO U.S. Pat. Appl. Publ., 32 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 20040132966	A1	20040708	US 2003-623118	20030718	<--
	WO 2004060863	A2	20040722	WO 2003-US22769	20030718	<--
	WO 2004060863	A3	20040916			
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
	AU 2003254065	A1	20040729	AU 2003-254065	20030718	<--
PRAI	US 2002-437508P	P	20021230	<--		
	WO 2003-US22769	W	20030718	<--		

OS MARPAT 141:106737

L53 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Human tissue-specific housekeeping genes identified by expression profiling
AB Housekeeping genes commonly expressed in 35 different human tissues, oligonucleotide probes and DNA microarrays containing them, are disclosed.
AN 2004:355085 HCAPLUS <<LOGINID::20081107>>
DN 140:369944
TI Human tissue-specific housekeeping genes identified by expression profiling
IN Aburatani, Hiroyuki; Yamamoto, Shogo
PA NGK Insulators, Ltd., Japan
SO PCT Int. Appl., 372 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2004035785	A1	20040429	WO 2002-JP10753	20021016	<--
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LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002344094 A1 20040504 AU 2002-344094 20021016 <--
US 20040229233 A1 20041118 US 2003-684422 20031015 <--
PRAI US 2002-418614P P 20021016 <--
WO 2002-JP10753 A 20021016 <--
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Methods of treating diabetes mellitus with orally administered insulin oligomers
AB Methods of treating diabetes mellitus using an effective amount of an oral insulin derivative are claimed. The structure of the insulin derivative is: insulin polypeptide-B-Lj-Gk-R-G'm-R'-G"n-T wherein: B is a bonding moiety; L is a linker moiety; G, G' and G" are individually selected spacer moieties; R is a lipophilic moiety and R' is a polyalkylene glycol moiety, or R' is the lipophilic moiety and R is the polyalkylene glycol moiety; T is a terminating moiety; and j, k, m and n are individually 0 or 1. The structure of the insulin derivative is: insulin polypeptide-X(CH2)mY(C2H4O)nR, insulin polypeptide -X(CH2)m(OC2H4)nOR, or insulin polypeptide -NH-CO-(CH2)m(OC2H4)nOR, wherein: X and Y are ester moieties, thioester moieties, ether moieties, carbamate moieties, thiocarbamate moieties, carbonate moieties, thiocarbonate moieties, amide moieties, urea moieties or covalent bonds; m is between 1 and 24; n is between 1 and 50; and R is an alkyl moiety, a sugar moiety, cholesterol, adamantane, an alc. moiety, or a fatty acid moiety. A specifically claimed derivative is insulin polypeptide-NH-CO-(CH2)5(OC2H4)7OCH3. Formulations for capsules are exemplified.
AN 2002:657913 HCAPLUS <<LOGINID::20081107>>
DN 137:196046
TI Methods of treating diabetes mellitus with orally administered insulin oligomers
IN Ekwuribe, Nnochiri N.; Price, Christopher H.; Still, James Gordon; Filbey, Jennifer Ann
PA Nobex Corporation, USA; Radhakrishnan, Balasingam; Ansari, Aslam M.; Odenbaugh, Amy L.
SO PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002065985	A2	20020829	WO 2002-US4440	20020214 <--
WO 2002065985	A3	20040219		

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GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	US 20030050228	A1	20030313	US 2002-75097	20020213	<--
	US 7060675	B2	20060613			
	CA 2437940	A1	20020829	CA 2002-2437940	20020214	<--
	AU 2002244020	A1	20020904	AU 2002-244020	20020214	<--
	AU 2002244020	B2	20070816			
	EP 1409006	A2	20040421	EP 2002-709541	20020214	<--
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	JP 2004527487	T	20040909	JP 2002-565546	20020214	<--
	JP 4113778	B2	20080709			
	BR 2002007700	A	20050719	BR 2002-7700	20020214	<--
	NZ 527392	A	20080131	NZ 2002-527392	20020214	<--
	MX 2003PA07374	A	20031204	MX 2003-PA7374	20030814	<--
	ZA 2003006332	A	20050526	ZA 2003-6332	20030814	<--
	US 20060100137	A1	20060511	US 2005-314309	20051221	<--
	US 7423014	B2	20080909			
	US 20060293219	A1	20061228	US 2006-424295	20060615	<--
	US 7381702	B2	20080603			
PRAI	US 2001-269198P	P	20010215	<--		
	US 2002-347713P	P	20020111	<--		
	US 2002-75097	A1	20020213	<--		
	WO 2002-US4440	W	20020214	<--		
	US 2005-314309	A1	20051221			

L53 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Extended native chemical ligation
AB The invention is directed to methods and compns. for chemical ligation of a first component having a carboxy thioester (preferably an α-carboxy thioester) moiety and a second component having an N-substituted (preferably Nα-substituted) 2 or 3 carbon chain alkyl or aryl thiol to give a ligation product having an N-substituted amide bond at the ligation site. The reactants of the invention are chemoselective and the alkyl or aryl thiol moiety is removable from the ligation product to give a native amide bond at the ligation site. The methods and compns. of the invention are particularly useful for ligation of peptides and polypeptides. N-substituted amides J1-C(O)-N[C1(R1)-C2-SH]-J2 and J1-C(O)-N[C1(R1)-C2(R2)-C3(R3)-SH]-J2 [J1, J2 = a peptide or polypeptide (or moiety) having one or more optionally protected amino acid side chains, a polymer, a dye, a functionalized surface, a linker, etc.; R1, R2, R3 = H or (at least one) an electron-donating group conjugated to C1] are claimed . The synthesis of cytochrome b562 (1-106) is given in an example.
AN 2002:185152 HCAPLUS <<LOGINID::20081107>>
DN 136:247891
TI Extended native chemical ligation
IN Botti, Paolo; Bradburne, James A.; Kent, Stephen B. H.; Low, Donald W.
PA Gryphon Sciences, USA
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2002020557	A1	20020314	WO 2001-US28172	20010907	<--
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            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2412298          A1    20020314    CA 2001-2412298         20010907 <--
     AU 2001088937       A     20020322    AU 2001-88937           20010907 <--
     EP 1315738          A1    20030604    EP 2001-968707          20010907 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004508383       T     20040318    JP 2002-525177          20010907 <--
     AU 2001288937       B2    20050428    AU 2001-288937          20010907 <--
     ZA 2003000314       A     20040204    ZA 2003-314             20030113 <--
     ZA 2003000315       A     20040204    ZA 2003-315             20030113 <--
     US 20040138412      A1    20040715    US 2003-333017          20030115 <--
     ZA 2003000659       A     20040305    ZA 2003-659             20030124 <--
     MX 2003PA01450      A     20041213    MX 2003-PA1450          20030217 <--
     JP 2007269799       A     20071018    JP 2007-125104          20070509 <--
     JP 2007302668       A     20071122    JP 2007-125101          20070509 <--
     JP 2008150393       A     20080703    JP 2008-25907           20080206 <--
PRAI US 2000-231339P     P     20000908  <--
     US 2000-236377P     P     20000929  <--
     JP 2002-524516      A3    20010712  <--
     JP 2002-524517      A3    20010712  <--
     JP 2002-525177      A3    20010907  <--
     WO 2001-US28172     W     20010907  <--
OS   MARPAT 136:247891
RE.CNT  3     THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53  ANSWER 6 OF 7  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Preparation and use of nucleophile-stable thioester generating
     compounds
AB   The invention is directed to nucleophile-stable thioester
     generating compds. comprising an orthothioloester X-C(OR')2SR [X is a
     target mol. of interest optionally comprising one or more
     nucleophile-labile protecting groups removable under nucleophilic cleavage
     conditions, R' is a nucleophile-stable protecting group removable under
     non-nucleophilic cleavage conditions, R is an group compatible with the
     orthothiolo moiety C(OR')2S] or a carboxyester thiol X-CO2CHR''(CH2)nSR'''
     [X same, R'' is H or a non-nucleophile stable group, n is 1 or 2, R''' is
     H, a protecting group or an acid, reductive, or light labile
     linker attached to a resin or protecting group that is removable
     under non-nucleophilic conditions].  The compds. and methods have wide
     applicability in organic synthesis, including the generation of peptide-,
     polypeptide- and other polymer-thioesters.  The invention is
     particularly useful for generating activated-thioesters from precursors
     that are made under conditions in which strong nucleophiles are employed,
     such as peptides or polypeptides made using Fmoc SPPS, as well as
     multi-step ligation or conjugation schemes that require (or
     benefit from the use of) compatible selective approaches for directing a
     specific ligation or conjugation reaction of interest.
AN   2002:171929  HCAPLUS <<LOGINID::20081107>>
DN   136:200486
TI   Preparation and use of nucleophile-stable thioester generating
     compounds
IN   Botti, Paolo; Bradburne, James A.; Kent, Stephen B. H.
PA   Gryphon Sciences, USA
SO   PCT Int. Appl., 41 pp.
     CODEN: PIXXD2
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DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018417	A1	20020307	WO 2001-US41938	20010830 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
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L53 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Influenza virus subunit conjugates
AB Conjugates of hemagglutinin (HA) protein of influenza virus suitable for formulation as a vaccine for obtaining a strong immune response to the HA protein are formed by separating whole HA protein from the influenza virus by detergent extraction or by providing whole HA protein by recombinant procedure, treating the HA protein with hydroxylamine to form free sulfhydryl groups in the cytoplasmic domain of the protein, and crosslinking the free sulfhydryl group-containing HA protein to itself using a bis-maleimide linker or to a maleimide-modified diphtheria toxoid, tetanus toxoid or influenza NP protein or other carrier mol. The procedure is applicable to other proteins which can be separated from a cellular material, such as a virus, and which contain thioester bonds convertible to sulfhydril groups.
AN 1996:311481 HCAPLUS <<LOGINID::20081107>>
DN 124:325363
OREF 124:60155a,60158a
TI Influenza virus subunit conjugates
IN Huebner, Robert C.; Harmon, Maurice W.
PA Connaught Laboratories, Inc., USA
SO PCT Int. Appl., 23 pp.
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